

**Alberta's occupational
demand and
supply outlook
2013 - 2023**

Disclaimer statement

Alberta Jobs, Skills, Training and Labour provides labour market information to assist both the government and the public in decision-making. Occupational demand and supply outlooks are affected by a variety of factors and will change over time. When making decisions based on forecasts, multiple sources of information should always be considered.

Work began on the Alberta Occupational Demand Outlook Model eleven years ago. Currently, the model is able to forecast occupational demand for 520 occupations in Alberta.

In 2003, work began on the Alberta Occupational Supply Outlook Model, a counterpart model that helps forecast labour supply and possible supply and demand imbalances that may occur in the future.

Jobs, Skills, Training and Labour continues to enhance the demand and supply models' precision and encourages readers to provide advice and feedback by emailing lsf.analyst@gov.ab.ca.

Overview

As part of the ongoing efforts to better understand and respond to future labour market needs, Alberta Jobs, Skills, Training and Labour contracts the Centre for Spatial Economics (C4SE) to forecast potential future occupational shortages or surpluses using Alberta's Occupational Demand and Supply models.

Figure 1 provides an overview of the two models. These models forecast the demand and supply for different occupations in Alberta from 2013 to 2023. By calculating imbalances between demand and supply, future occupational shortages or surpluses can be forecasted. Results from the two models help users make better decisions about developing and funding programs and policies as well as personal decisions about education, jobs and careers.

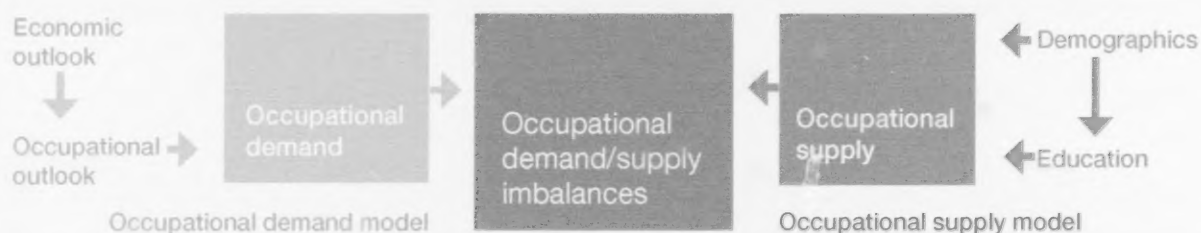
Each model can be broken down into sub-models, which use many data sources. The Alberta Occupational Supply Outlook Model (AOSOM) has 30 linked sub-models and over 100,000 data series. The Alberta Occupational Demand Outlook Model (AODOM) has been used for the past ten years and has proven to be reliable. Once occupational demand and supply have been forecasted, the cumulative labour shortages are calculated to measure imbalances.

There are different measures used to determine labour shortages. In this report, labour shortages are defined and estimated as net new job openings that are unfilled resulting from a change in employment less the change in labour supply. These are the new positions that are "hard to fill."

Over the forecast period 2013 to 2023, using both the Alberta Occupational Demand and Supply Outlook Models, potential labour imbalances for different occupations can be anticipated. It should be noted that both of these models make forecasts and therefore carry assumptions that may change in the future. Hence, a labour shortage or surplus may not be as severe as the models predict. For example, as occupational demand and supply conditions change, individuals may decide to enter a field of study that reflects these current conditions and more people may be attracted to the province. The results of these models are intended as indicators of where the current situation in Alberta may lead in future years.

This year's findings of the two models are provided in this report. Jobs, Skills, Training and Labour believes that continued work on the development of the AOSOM will help to provide important information on labour market imbalances. Jobs, Skills, Training and Labour encourages readers to provide advice and feedback on the model's usefulness, construction and results. Please see Appendices A and B for a detailed view of the model's methodology and assumptions.

Figure 1: An overview of the occupational demand and supply models



Overall occupational outlook

Over the next ten years, Alberta's labour market is forecasted to grow by approximately 407,000 workers at an annual average rate of 1.6%. A net increase of 311,000 workers is expected to join the labour force, as occupational supply increases at an annual rate of 1.2%. For the coming decade, Alberta could experience a labour shortage of around 96,000¹ workers. Table 1 shows more detailed information about the overall occupational outlook. The numbers in the table represent the number of workers in Alberta.

Table 1²

Overall occupational demand and supply outlook for Alberta, 2012 - 2023

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Demand (000s)	2,150	2,191	2,230	2,264	2,296	2,335	2,369	2,411	2,447	2,485	2,521	2,557
Labour supply (000s)	2,219	2,245	2,271	2,298	2,325	2,353	2,381	2,410	2,439	2,469	2,499	2,530
Annual shortage		15,272	12,191	7,264	4,970	11,550	5,263	13,414	7,066	8,338	5,870	4,913
Cumulative shortage		15,272	27,463	34,727	39,697	51,247	56,510	69,924	76,990	85,328	91,198	96,111

Appendices C and D list occupational demand and supply outlooks, along with forecasted imbalances, for 127 occupations at the 3-digit NOC-S³ and 286 occupations at the 4-digit NOC-S.

¹ This number is likely to change because the demand and supply models used for the forecasts carry assumptions that may change in the future.

² Labour shortage = (Demand [year t+1] - Demand [year t]) - (Supply [year t+1] - Supply [year t])

³ NOC-S: National Occupational Classification - Statistics, link:

www.statcan.gc.ca/subjects-sujets/standard-norme/soc-cnp/2006/noc2006-cnp2006-menu-eng.htm

Alberta occupational demand and supply outlook models' methodologies

Two main components in the Alberta Occupational Demand Outlook Model (AODOM) are the economic and occupational components. The economic component produces an outlook of Alberta's economy. Once the performance of the economy is forecasted, the occupational component calculates the employment that is required to maintain the forecasted growth.

The Alberta Occupational Supply Outlook Model (AOSOM) makes occupational supply forecasts with a series of changes that begin with a demographic outlook and end with occupational supply for occupations. The model has three major components: demographic, education and replacement demand. Education has a central importance in this model because of its role in training the labour force.

The flowchart illustrates the Alberta Occupational Outlook Model, which integrates demand and supply components to forecast occupational imbalances. The central element is a dark grey circle labeled "Supply/ demand imbalances".

Replacement demand component (Left Side):

- Demographic outlook:** Age/sex/net migration. This feeds into the "Forecasted death, retirements and other outflow attrition/ separation coefficients".
- Forecasted death, retirements and other outflow attrition/ separation coefficients:** This feeds into "Attrition coefficients applied to employment levels".
- Attrition coefficients applied to employment levels:** This feeds into "Forecasted replacement demand by occupation".
- Forecasted replacement demand by occupation:** This feeds into "Overall occupational growth (net new jobs)".

Supply component (Right Side):

- Enrolment, graduation, educational attainment by level of schooling & major field of study:** This feeds into the "Participation rate".
- Participation rate:** Stock-flow coefficient forecast. This feeds into "Labour supply by occupation".
- Labour supply by occupation:** Age/gender/ethnicity/ work activity limitations. This feeds into the central "Supply/ demand imbalances" circle.

Central and Top Components:

- Forecasted annual employment levels for all occupations:** This feeds into the central "Supply/ demand imbalances" circle.
- Overall occupational growth (net new jobs):** This feeds into "Forecasted annual employment levels for all occupations".
- Industry output forecast:** This feeds into "Industry employment forecast".
- Industry employment forecast:** This feeds into "Changing distribution of occupations by industry".
- Changing distribution of occupations by industry:** This feeds into "Employment by occupation".
- Employment by occupation:** Age/gender/ethnicity/ work activity limitations (based on historic share). This feeds into the central "Supply/ demand imbalances" circle.

Model Labels:

- Replacement demand component:** Indicated by a bracket on the left side of the flowchart.
- Supply component:** Indicated by a bracket on the right side of the flowchart.
- Alberta occupational demand outlook model:** Indicated by a bracket on the right side, encompassing the top right components.
- Alberta occupational supply outlook model:** Indicated by a bracket on the right side, encompassing the bottom right components.

Appendix B

Alberta occupational supply outlook model assumptions

As with all forecasts, a number of assumptions are used to derive the results. The model can utilize different assumptions to test various economic scenarios. The assumptions used to generate the results in Appendix C & D are set out below.

Alberta's key economic indicators

- The average annual⁴ growth rate for the Gross Domestic Product (GDP) is 2.9%.
- The average annual unemployment rate is 4.2%.
- The average annual employment growth rate is 1.6%.
- The average annual participation rate is 72.2%.

Demographic component

Population levels by age and gender groups are determined by a detailed population forecast by single year age cohorts. Total population averages 1.7% growth over 2013 - 2023.

Migration

- The level of in-migration equals the forecasted net migration plus the assumed out-migration.
- Age and gender distributions for in-migration and out-migration are determined by the historic age and gender distribution for net migration.
- Future immigrants by education type will experience similar occupational outcomes as existing residents of Alberta.

Aboriginals

- The Alberta aboriginal population's age specific birth and death rates are the same as the Canadian aboriginal population's rates.

Visible minorities

- The visible minorities' age/gender birth and death rates are equal to the Alberta general population's birth and death rates.
- The visible minorities' less than 15 years old age groups (less than 1, 1-3, 4-9, 10-15 years) are assumed to have the same distributions as the Alberta younger age groups.

Activity limitations

To calculate the number of people with activity limitations, a share approach by age and gender was used.⁵

Education component

Enrolment & graduation

- The number of people who attend school is calculated as a share of the total number in that age or gender group. This proportion is based on historic shares.
- The secondary school enrolment rates for males and females over the forecast follow the historic trends from 2002-2003 to 2011-2012.
- Enrolment rates for post-secondary institutions over the forecast were kept constant at the 2011-2012 school year rates.
- Graduation rates are determined by level of schooling, field of study, age and gender. Graduation rates are calculated as a share of those who could potentially graduate and are kept constant over the forecast period.
- The overall number of university, college, vocational and trades graduates is determined by applying the graduate rate to the different age groups who are enrolled in that institution and could potentially graduate.
- Drop out rates and mature student rates are used for the different fields of study and level of schooling.
- Migration rates by educational attainment are allowed to adjust to reflect relative demand conditions in Alberta.

⁴The average annual data is for the period 2013 - 2023

⁵Share approach: A method to estimate the future number of people in a group of interest. The proportion of the group of interest to the general population is applied to the forecasted general population estimates to find the predicted group of interest's population. Example:

$$\left[\frac{\text{Activity limitations}}{\text{Alberta population}} \right]_t \times \text{Alberta population forecast}_{t+1} = \text{Activity limitation population}_{t+1}$$

The proportion at time t *Is multiplied by the forecasted Alberta Population for time t+1* *To find the forecasted number of people with activities limitations for time t+1*

Educational attainment

- To calculate the number of people with university, college, vocational and trades, and high school education, a stock-flow approach⁶ is used.
- Those with less than a high school education are determined to be those not already accounted for in other educational attainment categories.
- Less than high school educational attainment is adjusted to reflect the estimated portion of mature students in post-secondary institutions that do not have a high school diploma. High school educational attainment is also adjusted to subtract recent graduates from university, college and vocational and trades.
- The overall enrolment rate for mature students is used for all age groups within the mature student category.
- To forecast educational attainment by field of study, the historic relative enrolment rate for each age and sex cohort is maintained over the forecast period.
- The share of new graduates by field of study for each age, sex group is constant over time.
- Educational attainment is based on the new graduate forecast plus net inflows from migration less deaths.

Replacement demand component

- Retirement rates are derived from Alberta Labour Force Survey (LFS) data, at a fairly aggregate occupational level.
- Retirement by occupation uses the age distribution in that occupation given by the census. As people working in a specific occupation enter older age cohorts a larger share will retire. Age specific retirement rates rise over time to the long-term trend toward falling median retirement ages.
- Other labour force separation rates are derived from the Alberta LFS data at the major group level of aggregation. These separation rates are kept constant over the forecast period.
- Emigration, out-migration and death rates are assumed to be the same for those employed as the general population for a particular age/gender group.

Occupational component

- Potential occupational supply is determined over the historical period by the historical distribution of occupation by educational attainment—four levels of schooling and 46 post-secondary fields of study.
- Over the forecast period, the distribution of occupation by educational attainment will adjust to changes in relative occupation to educational demand at a pace that is consistent with differences in occupational separation rates.
- Potential occupational supply is translated into actual occupational supply by using historic participation rates by occupation. Over the forecast period, occupational participation rates adjust to reflect changes in relative occupational demand.

⁶*Stock-Flow Approach: A method in estimating the future population of people in a group of interest. To find the forecasted population, the population from the previous year is adjusted to add those expected to enter that group and subtract those that are expected to leave that group. Example:*

$$\begin{array}{rclclcl}
 \text{Number of people} & & \text{Number of people} & & \text{Recent} & & \text{People leaving} \\
 \text{with college/} & & \text{with college/} & & \text{graduates of} & & \text{group due to death,} \\
 \text{trades training} & = & \text{trades training} & + & \text{college/trades} & = & \text{retirement, etc.} \\
 t & & t & & t+1 & & t+1
 \end{array}$$

Appendix C

Results of Alberta's Occupational Demand and Supply for 3-Digit NOC-S Occupations, 2013-2023

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
All Occupations											
Demand forecast (000s)	2,190,910	2,229,558	2,263,709	2,296,000	2,335,316	2,368,799	2,410,895	2,447,112	2,485,081	2,521,072	2,556,606
Labour supply forecast (000s)	2,244,736	2,271,193	2,298,080	2,325,401	2,353,167	2,381,387	2,410,069	2,439,220	2,468,851	2,498,972	2,529,593
Cumulative shortage*	15,272	27,463	34,727	39,697	51,247	56,510	69,924	76,990	85,328	91,198	96,111
A01 - Legislators and senior management**											
Demand forecast	7,133	7,250	7,350	7,429	7,574	7,688	7,831	7,935	8,047	8,155	8,248
Labour supply forecast	7,058	7,115	7,172	7,230	7,288	7,346	7,406	7,465	7,525	7,585	7,646
Cumulative shortage*	77	137	180	201	288	344	427	472	524	572	604
A11 - Administrative services managers											
Demand forecast	13,152	13,362	13,551	13,709	13,971	14,187	14,443	14,648	14,870	15,078	15,264
Labour supply forecast	13,207	13,335	13,465	13,595	13,727	13,861	13,995	14,131	14,268	14,407	14,547
Cumulative shortage*	126	208	267	295	425	507	629	698	783	852	898
A12 - Managers in engineering, architecture, science and information systems											
Demand forecast	8,426	8,517	8,593	8,656	8,784	8,893	9,012	9,113	9,233	9,343	9,439
Labour supply forecast	8,267	8,331	8,394	8,459	8,524	8,589	8,655	8,722	8,789	8,856	8,924
Cumulative shortage*	157	184	197	195	258	302	355	389	442	485	513
A13 - Sales, marketing and advertising managers											
Demand forecast	10,124	10,210	10,307	10,422	10,591	10,729	10,879	11,019	11,181	11,323	11,468
Labour supply forecast	10,315	10,391	10,468	10,545	10,623	10,702	10,781	10,861	10,941	11,022	11,103
Cumulative shortage*	-50	-40	-20	18	109	168	239	299	381	442	506
A14 - Facility operation and maintenance managers**											
Demand forecast	5,261	5,326	5,379	5,423	5,503	5,582	5,674	5,760	5,855	5,941	6,029
Labour supply forecast	5,308	5,341	5,374	5,408	5,441	5,475	5,509	5,544	5,578	5,613	5,648
Cumulative shortage*	25	57	77	87	134	179	237	288	349	400	453
A21 - Managers in retail trade											
Demand forecast	31,061	30,846	31,115	31,800	32,516	33,032	33,524	33,968	34,356	34,741	35,093
Labour supply forecast	32,091	32,181	32,272	32,364	32,455	32,547	32,639	32,731	32,824	32,917	33,010
Cumulative shortage*	-230	-535	-357	236	861	1285	1685	2037	2332	2624	2883
A22 - Managers in food service and accommodation											
Demand forecast	20,485	21,027	21,739	22,331	22,744	23,161	23,740	24,242	24,793	25,044	25,414
Labour supply forecast	19,861	20,332	20,815	21,309	21,815	22,333	22,864	23,407	23,963	24,532	25,114
Cumulative shortage*	826	897	1126	1224	1131	1030	1078	1037	1032	714	502
A30 - Managers in financial and business services											
Demand forecast	7,224	7,307	7,365	7,413	7,486	7,559	7,650	7,728	7,822	7,893	7,972
Labour supply forecast	6,847	6,949	7,053	7,158	7,264	7,373	7,482	7,594	7,707	7,822	7,938
Cumulative shortage*	426	407	361	304	271	235	217	183	164	120	83
A32 - Managers in health, education, social and community services											
Demand forecast	11,370	11,783	12,214	12,556	12,910	13,243	13,577	13,930	14,272	14,635	14,987
Labour supply forecast	11,377	11,688	12,007	12,334	12,671	13,016	13,372	13,736	14,111	14,496	14,892
Cumulative shortage*	72	174	286	301	318	306	284	273	240	218	174
A33 - Managers in public administration											
Demand forecast	3,756	3,859	3,968	4,025	4,167	4,297	4,400	4,487	4,571	4,646	4,703
Labour supply forecast	3,788	3,849	3,912	3,975	4,040	4,105	4,172	4,239	4,308	4,378	4,449
Cumulative shortage*	-5	37	83	77	154	219	255	275	290	295	281
A34 - Managers in art, culture, recreation & sport**											
Demand forecast	1,760	1,811	1,860	1,898	1,951	1,998	2,047	2,092	2,139	2,184	2,225
Labour supply forecast	1,736	1,763	1,790	1,818	1,846	1,874	1,903	1,933	1,963	1,993	2,023
Cumulative shortage*	37	61	83	93	118	137	157	172	189	204	214

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
A36 - Managers in other services**											
Demand forecast	2,926	2,988	3,047	3,095	3,154	3,210	3,272	3,331	3,397	3,459	3,523
Labour supply forecast	2,879	2,938	2,999	3,060	3,123	3,188	3,253	3,320	3,388	3,458	3,529
Cumulative shortage*	66	69	67	54	50	41	38	30	28	20	13
A37 - Managers in construction and transportation											
Demand forecast	27,370	28,126	28,497	28,826	29,218	29,369	29,984	30,259	30,483	30,889	31,310
Labour supply forecast	27,996	28,300	28,606	28,916	29,230	29,547	29,867	30,191	30,518	30,849	31,184
Cumulative shortage*	-429	23	88	107	185	19	314	265	162	237	323
A38 - Managers in primary production (except agriculture)											
Demand forecast	7,943	7,993	8,024	8,088	7,962	8,044	8,158	8,225	8,269	8,338	8,394
Labour supply forecast	7,911	7,921	7,931	7,941	7,951	7,961	7,971	7,981	7,991	8,001	8,011
Cumulative shortage*	31	71	92	146	10	82	186	243	277	336	382
A39 - Managers in manufacturing and utilities**											
Demand forecast	5,380	5,418	5,415	5,418	5,468	5,496	5,509	5,542	5,581	5,619	5,632
Labour supply forecast	5,340	5,344	5,349	5,353	5,357	5,361	5,365	5,370	5,374	5,378	5,382
Cumulative shortage*	78	112	104	103	149	173	182	210	245	279	288
B01 - Auditors, accountants and investment professionals											
Demand forecast	49,404	49,947	50,382	50,741	51,456	52,075	52,776	53,350	54,018	54,599	55,109
Labour supply forecast	48,599	49,206	49,821	50,443	51,073	51,710	52,356	53,010	53,672	54,342	55,020
Cumulative shortage*	1204	1140	960	697	782	764	819	739	745	656	488
B02 - Human resources and business service professionals											
Demand forecast	24,158	24,454	24,729	24,939	25,355	25,720	26,111	26,445	26,841	27,188	27,498
Labour supply forecast	24,072	24,347	24,625	24,906	25,191	25,478	25,769	26,064	26,361	26,662	26,966
Cumulative shortage*	484	505	502	431	562	640	740	779	878	924	930
B11 - Finance and insurance administrative occupations											
Demand forecast	38,088	38,574	38,947	39,259	39,749	40,191	40,779	41,247	41,795	42,281	42,795
Labour supply forecast	37,630	38,065	38,505	38,950	39,400	39,855	40,316	40,782	41,253	41,730	42,212
Cumulative shortage*	1055	1106	1039	906	946	933	1060	1062	1139	1148	1180
B21 - Secretaries, recorders and transcriptionists											
Demand forecast	14,431	14,739	15,011	15,237	15,532	15,786	16,100	16,363	16,640	16,924	17,200
Labour supply forecast	14,673	14,950	15,233	15,522	15,816	16,115	16,420	16,731	17,048	17,371	17,699
Cumulative shortage*	56	87	76	13	14	-31	-22	-70	-110	-149	-201
B31 - Administrative and regulatory occupations											
Demand forecast	56800	57821	58709	59425	60586	61528	62686	63571	64510	65420	66224
Labour supply forecast	57586	58382	59189	60008	60837	61679	62531	63396	64273	65161	66063
Cumulative shortage*	616	841	922	819	1151	1251	1557	1577	1639	1661	1563
B41 - Clerical supervisors											
Demand forecast	24105	24358	24534	24639	24987	25349	25768	26143	26588	26968	27353
Labour supply forecast	24463	24729	24996	25270	25544	25822	26102	26386	26672	26962	27255
Cumulative shortage*	143	130	37	-130	-56	28	167	258	417	507	599
B51 - Clerical occupations, general office skills											
Demand forecast	34749	35468	36116	36663	37434	38090	38822	39470	40168	40847	41462
Labour supply forecast	35608	36020	36438	36860	37287	37718	38155	38597	39044	39497	39954
Cumulative shortage*	440	747	977	1102	1446	1671	1966	2172	2423	2649	2807
B52 - Office equipment operators											
Demand forecast	8323	8446	8554	8638	8796	8936	9090	9223	9375	9510	9632
Labour supply forecast	8484	8569	8655	8742	8829	8918	9007	9097	9189	9281	9374
Cumulative shortage*	136	174	196	193	264	315	380	423	483	526	555

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
B53 - Finance and insurance clerks											
Demand forecast	48814	49443	49929	50338	51044	51666	52422	53052	53764	54389	54991
Labour supply forecast	48930	49465	50007	50554	51108	51667	52233	52804	53382	53967	54557
Cumulative shortage*	1289	1383	1327	1189	1341	1404	1594	1653	1787	1827	1839
B54 - Administrative support clerks											
Demand forecast	32419	33122	33789	34296	35173	35889	36698	37335	38019	38668	39207
Labour supply forecast	32819	33450	34093	34748	35416	36097	36791	37499	38220	38954	39703
Cumulative shortage*	101	173	197	49	258	293	408	337	300	215	5
B55 - Library, correspondence and related information clerks											
Demand forecast	17620	17852	18072	18255	18621	18908	19200	19461	19763	20026	20241
Labour supply forecast	18335	18470	18606	18744	18882	19022	19162	19304	19447	19590	19735
Cumulative shortage*	290	387	471	516	744	891	1043	1162	1321	1441	1511
B56 - Mail and message distribution occupations											
Demand forecast	12690	12739	12704	12628	12664	12813	13000	13211	13487	13708	13993
Labour supply forecast	12990	13081	13172	13264	13356	13449	13543	13637	13732	13828	13924
Cumulative shortage*	-2	-44	-170	-338	-394	-338	-245	-128	53	178	367
B57 - Recording, scheduling and distributing occupations											
Demand forecast	31358	31572	31713	31858	32269	32693	33180	33647	34198	34677	35192
Labour supply forecast	32721	33045	33373	33704	34037	34375	34715	35059	35407	35758	36112
Cumulative shortage*	-563	-673	-860	-1046	-968	-882	-735	-512	-409	-281	-120
C01 - Physical science professionals											
Demand forecast	7269	7331	7387	7447	7546	7640	7751	7828	7908	7989	8059
Labour supply forecast	7437	7485	7533	7582	7631	7680	7730	7780	7830	7881	7932
Cumulative shortage*	21	35	43	54	104	149	210	237	267	297	316
C02 - Life science professionals**											
Demand forecast	4327	4402	4484	4533	4662	4760	4866	4939	5023	5095	5144
Labour supply forecast	4315	4350	4385	4421	4457	4493	4530	4567	4604	4641	4679
Cumulative shortage*	91	131	178	191	284	346	415	451	498	533	544
C03 - Civil, mechanical, electrical and chemical engineers											
Demand forecast	24271	24495	24642	24764	25054	25287	25550	25777	26069	26332	26559
Labour supply forecast	24285	24457	24629	24803	24978	25154	25332	25510	25690	25872	26054
Cumulative shortage*	604	656	631	579	694	751	836	885	997	1078	1123
C04 - Other engineers											
Demand forecast	16499	16599	16699	16799	16999	17199	17399	17599	17699	17899	18099
Labour supply forecast	16904	16982	17061	17139	17219	17298	17378	17459	17539	17621	17702
Cumulative shortage*	26	48	69	91	211	332	452	571	591	709	828
C05 - Architects, urban planners and land surveyors											
Demand forecast	8034	8128	8221	8282	8427	8541	8675	8768	8890	8994	9085
Labour supply forecast	7971	8038	8106	8174	8242	8312	8381	8451	8522	8594	8666
Cumulative shortage*	266	293	318	311	388	432	497	520	571	603	622
C07 - Computer and information systems professionals											
Demand forecast	39043	39462	39855	40158	40762	41307	41880	42387	43013	43555	44062
Labour supply forecast	39099	39509	39923	40342	40765	41193	41625	42061	42503	42948	43399
Cumulative shortage*	936	945	924	808	989	1106	1247	1318	1502	1599	1655
C11 - Technical occupations in physical sciences											
Demand forecast	5491	5538	5577	5612	5688	5755	5830	5885	5948	6007	6054
Labour supply forecast	5536	5537	5539	5540	5541	5542	5543	5545	5546	5547	5548
Cumulative shortage*	90	136	173	207	282	348	422	475	537	595	641

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
C12 - Technical occupations in life sciences**											
Demand forecast	3192	3254	3321	3360	3464	3543	3630	3687	3751	3806	3843
Labour supply forecast	3219	3259	3300	3341	3382	3424	3467	3510	3553	3597	3642
Cumulative shortage*	49	71	97	95	158	195	239	253	274	285	277
C13 - Technical occupations in civil, mechanical and industrial engineering											
Demand forecast	11167	11386	11521	11642	11827	11924	12115	12218	12320	12456	12570
Labour supply forecast	11340	11402	11465	11528	11592	11656	11720	11785	11850	11915	11981
Cumulative shortage*	100	257	329	387	508	541	668	706	743	814	862
C14 - Technical occupations in electronics and electrical engineering											
Demand forecast	14013	14183	14302	14418	14631	14797	14980	15148	15333	15516	15666
Labour supply forecast	14243	14345	14447	14549	14652	14756	14861	14967	15073	15180	15288
Cumulative shortage*	115	183	200	214	324	386	464	526	605	681	723
C15 - Technical occupations in architecture, drafting and surveying											
Demand forecast	12067	12188	12292	12368	12538	12674	12831	12953	13116	13256	13388
Labour supply forecast	11975	12064	12154	12244	12335	12427	12520	12613	12707	12802	12897
Cumulative shortage*	380	412	426	412	491	535	599	628	697	742	779
C16 - Other technical inspectors and regulatory officers											
Demand forecast	19,297	19,585	19,803	19,978	20,329	20,590	20,937	21,167	21,415	21,669	21,873
Labour supply forecast	19,677	19,882	20,090	20,299	20,511	20,724	20,940	21,158	21,379	21,601	21,826
Cumulative shortage*	94	177	187	153	292	340	471	483	510	542	521
C17 - Transportation officers and controllers**											
Demand forecast	2,412	2,420	2,412	2,456	2,462	2,491	2,527	2,569	2,622	2,666	2,708
Labour supply forecast	2,468	2,477	2,486	2,495	2,504	2,513	2,522	2,531	2,540	2,550	2,559
Cumulative shortage*	5	4	-13	22	19	39	66	99	143	177	210
C18 - Technical occupations in computer and information systems											
Demand forecast	14,197	14,367	14,535	14,674	14,918	15,133	15,358	15,561	15,800	16,014	16,216
Labour supply forecast	14,249	14,354	14,460	14,566	14,673	14,781	14,890	14,999	15,110	15,221	15,333
Cumulative shortage*	292	357	419	452	589	696	812	906	1034	1137	1227
D01 - Physicians, dentists and veterinarians											
Demand forecast	10168	10553	10931	11291	11605	11913	12237	12571	12928	13294	13666
Labour supply forecast	10,138	10,279	10,421	10,565	10,711	10,860	11,010	11,162	11,317	11,473	11,632
Cumulative shortage*	131	375	611	827	995	1154	1328	1510	1712	1922	2135
D02 - Optometrists, chiropractors and other health diagnosing and treating professionals**											
Demand forecast	1,941	2,019	2,095	2,169	2,232	2,293	2,358	2,424	2,496	2,569	2,644
Labour supply forecast	1,946	1,993	2,041	2,091	2,141	2,193	2,246	2,301	2,356	2,413	2,472
Cumulative shortage*	-2	29	57	81	94	103	115	126	143	159	175
D03 - Pharmacists, dietitians and nutritionists**											
Demand forecast	5,401	5,419	5,566	5,737	5,899	6,040	6,179	6,329	6,490	6,647	6,808
Labour supply forecast	5,463	5,527	5,592	5,657	5,723	5,790	5,858	5,926	5,995	6,066	6,136
Cumulative shortage*	-57	-103	-21	85	181	255	326	408	500	586	677
D04 - Therapy and assessment professionals**											
Demand forecast	7,694	8,004	8,309	8,596	8,844	9,086	9,340	9,606	9,884	10,173	10,467
Labour supply forecast	7,746	7,895	8,046	8,201	8,358	8,519	8,682	8,849	9,019	9,192	9,368
Cumulative shortage*	44	205	359	491	582	663	754	853	961	1077	1195
D11 - Nurse supervisors and registered nurses											
Demand forecast	38,412	39,951	41,454	42,885	44,126	45,339	46,616	47,938	49,330	50,769	52,226
Labour supply forecast	38,594	39,405	40,233	41,078	41,941	42,822	43,722	44,640	45,578	46,536	47,513
Cumulative shortage*	121	849	1524	2110	2488	2820	3197	3601	4055	4536	5016

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
D21 - Medical technologists and technicians (except dental health)											
Demand forecast	12,336	12,784	13,226	13,644	14,013	14,375	14,755	15,148	15,568	15,998	16,436
Labour supply forecast	12,478	12,762	13,053	13,351	13,655	13,966	14,285	14,610	14,943	15,284	15,632
Cumulative shortage*	55	219	370	490	555	606	667	735	822	911	1001
D22 - Technical occupations in dental health care**											
Demand forecast	4,489	4,663	4,831	4,989	5,131	5,270	5,413	5,562	5,720	5,882	6,047
Labour supply forecast	4,693	4,788	4,885	4,984	5,085	5,188	5,294	5,401	5,510	5,622	5,736
Cumulative shortage*	0	79	150	209	250	286	323	365	414	464	515
D23 - Other technical occupations in health care (except dental)											
Demand forecast	18,006	18,683	19,349	19,973	20,558	21,115	21,702	22,293	22,915	23,552	24,185
Labour supply forecast	18,435	18,880	19,336	19,803	20,281	20,771	21,273	21,787	22,313	22,852	23,404
Cumulative shortage*	-26	206	416	573	680	747	832	909	1005	1103	1184
D31 - Assisting occupations in support of health services											
Demand forecast	37,270	38,392	39,505	40,611	41,748	42,896	44,055	45,222	46,398	47,604	48,804
Labour supply forecast	37,988	38,793	39,614	40,454	41,310	42,185	43,079	43,992	44,923	45,875	46,847
Cumulative shortage*	-23	294	586	852	1133	1406	1671	1925	2170	2424	2652
E01 - Judges, lawyers and Quebec notaries											
Demand forecast	8,920	9,007	9,107	9,168	9,328	9,465	9,612	9,722	9,872	9,990	10,099
Labour supply forecast	8,698	8,833	8,971	9,111	9,253	9,398	9,545	9,694	9,845	9,998	10,154
Cumulative shortage*	282	234	196	117	135	127	127	88	87	52	5
E02 - Psychologists, social workers, counsellors, clergy and probation officers											
Demand forecast	16,012	16,592	17,171	17,657	18,242	18,757	19,306	19,802	20,321	20,840	21,313
Labour supply forecast	16,126	16,552	16,990	17,438	17,899	18,372	18,858	19,356	19,867	20,392	20,931
Cumulative shortage*	-1	153	294	332	456	498	561	559	567	561	495
E03 - Policy and program officers, researchers and consultants											
Demand forecast	17,427	17,779	18,129	18,378	18,839	19,217	19,621	19,952	20,313	20,647	20,918
Labour supply forecast	17,362	17,706	18,056	18,413	18,778	19,149	19,528	19,915	20,309	20,711	21,120
Cumulative shortage*	186	194	194	86	182	189	214	158	125	57	-81
E11 - University professors and assistants											
Demand forecast	16,887	17,336	17,786	18,224	18,690	19,134	19,556	20,042	20,473	20,892	21,218
Labour supply forecast	17,269	17,645	18,030	18,423	18,825	19,236	19,655	20,084	20,522	20,970	21,427
Cumulative shortage*	124	197	262	307	371	404	407	464	457	428	297
E12 - College and other vocational instructors											
Demand forecast	10,055	10,330	10,624	10,829	11,082	11,316	11,549	11,794	12,025	12,269	12,490
Labour supply forecast	10,219	10,442	10,671	10,905	11,143	11,387	11,636	11,891	12,151	12,417	12,689
Cumulative shortage*	37	89	154	125	140	130	114	104	75	53	2
E13 - Secondary and elementary school teachers and educational counsellors											
Demand forecast	43,975	45,037	46,170	47,309	48,522	49,677	50,774	52,037	53,157	54,408	55,623
Labour supply forecast	44,780	45,782	46,806	47,853	48,923	50,017	51,136	52,280	53,450	54,645	55,868
Cumulative shortage*	94	154	263	355	498	559	537	656	606	662	654
E21 - Paralegals, social services and occupations in education and religion, n.e.c.***											
Demand forecast	45,651	47,047	48,524	49,884	51,258	52,556	53,922	55,267	56,592	57,919	59,205
Labour supply forecast	46,409	47,545	48,709	49,902	51,124	52,375	53,658	54,971	56,317	57,696	59,109
Cumulative shortage*	240	500	813	980	1132	1179	1262	1294	1273	1221	1094
F02 - Writing, translating and public relations professionals											
Demand forecast	9,539	9,735	9,925	10,066	10,302	10,504	10,717	10,903	11,107	11,297	11,463
Labour supply forecast	9,342	9,486	9,632	9,780	9,931	10,084	10,239	10,397	10,557	10,720	10,885
Cumulative shortage*	201	250	297	290	375	424	482	510	554	581	582

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
F03 - Creative and performing artists											
Demand forecast	9,799	10,113	10,442	10,687	10,957	11,212	11,463	11,737	11,996	12,273	12,543
Labour supply forecast	9,816	10,037	10,263	10,494	10,730	10,971	11,218	11,470	11,728	11,992	12,262
Cumulative shortage*	187	280	383	397	431	445	449	471	472	485	485
F11 - Technical occupations in libraries, archives, museums and art galleries**											
Demand forecast	2,501	2,578	2,659	2,718	2,792	2,859	2,926	2,995	3,061	3,130	3,194
Labour supply forecast	2,548	2,596	2,646	2,696	2,747	2,799	2,853	2,907	2,962	3,019	3,076
Cumulative shortage*	50	79	110	119	142	157	170	185	196	208	215
F12 - Photographers, graphic arts technicians and technical and coordinating occupations in motion pictures, broadcasting and the performing arts**											
Demand forecast	3,050	3,100	3,151	3,192	3,248	3,301	3,357	3,410	3,474	3,531	3,590
Labour supply forecast	2,952	3,005	3,059	3,114	3,170	3,227	3,285	3,344	3,404	3,465	3,527
Cumulative shortage*	102	99	96	82	82	78	76	70	74	70	67
F14 - Creative designers and craftspersons											
Demand forecast	8,872	8,959	9,050	9,127	9,260	9,374	9,502	9,611	9,754	9,876	10,007
Labour supply forecast	8,775	8,850	8,926	9,002	9,079	9,157	9,235	9,315	9,394	9,475	9,556
Cumulative shortage*	201	213	228	229	285	321	371	400	464	505	555
F15 - Athletes, coaches, referees and related occupations											
Demand forecast	10,901	11,240	11,587	11,847	12,198	12,505	12,830	13,127	13,427	13,717	13,980
Labour supply forecast	11,416	11,637	11,861	12,090	12,323	12,561	12,804	13,051	13,303	13,559	13,821
Cumulative shortage*	190	308	431	462	580	649	731	781	829	863	864
G01 - Sales and service supervisors											
Demand forecast	38,090	38,729	39,658	40,556	41,349	42,073	42,944	43,756	44,668	45,209	45,889
Labour supply forecast	38,269	38,950	39,642	40,347	41,065	41,795	42,539	43,295	44,065	44,849	45,646
Cumulative shortage*	319	277	514	707	782	776	903	959	1101	858	741
G11 - Sales representatives - wholesale trade											
Demand forecast	26,143	26,436	26,486	26,807	27,085	27,485	27,837	28,207	28,582	28,958	29,338
Labour supply forecast	26,658	26,917	27,180	27,445	27,712	27,983	28,255	28,531	28,809	29,090	29,373
Cumulative shortage*	83	117	-96	-40	-29	100	180	274	371	466	563
G12 - Technical sales specialists - wholesale trade											
Demand forecast	16,379	16,419	16,500	16,685	16,959	17,144	17,300	17,481	17,692	17,879	18,043
Labour supply forecast	17,461	17,522	17,584	17,645	17,707	17,769	17,831	17,893	17,956	18,019	18,082
Cumulative shortage*	-382	-403	-384	-260	-48	75	169	288	436	560	661
G13 - Insurance and real estate sales occupations and buyers											
Demand forecast	16,115	16,309	16,445	16,573	16,750	16,909	17,121	17,297	17,498	17,660	17,838
Labour supply forecast	15,855	16,011	16,169	16,329	16,490	16,653	16,817	16,983	17,151	17,320	17,491
Cumulative shortage*	355	393	371	339	355	351	399	409	442	435	442
G21 - Retail salespersons and sales clerks											
Demand forecast	68,517	69,286	69,866	71,069	71,522	72,598	73,581	74,652	75,884	76,887	77,967
Labour supply forecast	70,498	71,000	71,506	72,015	72,527	73,044	73,563	74,087	74,614	75,145	75,679
Cumulative shortage*	1216	1483	1557	2251	2192	2751	3215	3762	4467	4939	5485
G31 - Cashiers											
Demand forecast	39,001	39,401	40,201	41,101	42,101	42,801	43,601	44,501	45,401	46,001	46,701
Labour supply forecast	41,564	42,034	42,509	42,989	43,474	43,965	44,462	44,964	45,472	45,986	46,505
Cumulative shortage*	-1065	-1135	-810	-390	125	334	637	1035	1427	1513	1694
G41 - Chefs and cooks											
Demand forecast	30,799	31,599	32,699	33,599	34,199	34,899	35,699	36,499	37,299	37,699	38,299
Labour supply forecast	31,418	32,049	32,693	33,349	34,018	34,701	35,398	36,109	36,833	37,573	38,327
Cumulative shortage*	1185	1354	1810	2054	1985	2002	2105	2194	2270	1930	1776

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G51 - Occupations in food and beverage service											
Demand forecast	36,521	37,497	38,782	39,852	40,590	41,338	42,379	43,280	44,268	44,711	45,371
Labour supply forecast	36,528	37,270	38,027	38,800	39,589	40,393	41,214	42,052	42,906	43,778	44,668
Cumulative shortage*	1592	1826	2354	2651	2600	2544	2764	2827	2961	2532	2302
G61 - Police officers and firefighters											
Demand forecast	10,432	10,739	11,075	11,238	11,594	11,991	12,261	12,510	12,771	12,993	13,154
Labour supply forecast	10,521	10,744	10,972	11,205	11,442	11,685	11,933	12,186	12,444	12,708	12,977
Cumulative shortage*	-90	-6	102	32	151	305	327	323	326	284	176
G62 - Other occupations in protective service**											
Demand forecast	6,191	6,365	6,556	6,651	6,914	7,143	7,300	7,443	7,596	7,725	7,820
Labour supply forecast	6,459	6,574	6,690	6,808	6,929	7,052	7,176	7,303	7,433	7,564	7,698
Cumulative shortage*	-20	39	114	91	233	339	372	388	411	409	370
G63 - Security guards and related occupations											
Demand forecast	8,948	9,035	9,133	9,203	9,329	9,452	9,586	9,702	9,859	9,980	10,112
Labour supply forecast	8,968	9,089	9,211	9,335	9,460	9,587	9,716	9,847	9,979	10,114	10,250
Cumulative shortage*	326	292	268	214	215	211	216	201	226	212	208
G71 - Occupations in travel and accommodation											
Demand forecast	7,718	7,789	7,846	7,873	7,929	8,032	8,166	8,302	8,474	8,590	8,746
Labour supply forecast	7,882	7,965	8,049	8,134	8,220	8,306	8,394	8,482	8,571	8,662	8,753
Cumulative shortage*	139	127	100	42	12	29	75	123	206	231	296
G72 - Tour and recreational guides and casino occupations**											
Demand forecast	2,412	2,471	2,529	2,577	2,631	2,684	2,742	2,798	2,858	2,913	2,969
Labour supply forecast	2,449	2,498	2,549	2,601	2,654	2,708	2,762	2,819	2,876	2,934	2,994
Cumulative shortage*	63	73	80	76	77	76	80	79	82	79	75
G73 - Other occupations in travel, accommodation, amusement and recreation											
Demand forecast	3,830	3,917	4,005	4,071	4,161	4,248	4,349	4,438	4,535	4,612	4,691
Labour supply forecast	4,155	4,211	4,267	4,325	4,383	4,442	4,501	4,562	4,623	4,685	4,748
Cumulative shortage*	77	108	140	148	180	208	250	278	314	329	345
G81 - Childcare and home support workers											
Demand forecast	28,881	29,894	30,943	31,790	32,625	33,426	34,231	35,099	35,946	36,846	37,738
Labour supply forecast	29,770	30,561	31,373	32,206	33,062	33,940	34,841	35,767	36,717	37,692	38,693
Cumulative shortage*	209	431	668	682	661	584	488	430	327	252	143
G91 - Technical occupations in personal service											
Demand forecast	12,976	13,371	13,735	14,048	14,402	14,737	15,083	15,436	15,801	16,166	16,525
Labour supply forecast	12,829	13,167	13,514	13,871	14,236	14,611	14,996	15,391	15,797	16,213	16,640
Cumulative shortage*	250	307	324	280	269	229	190	148	107	56	-12
G92 - Other occupations in personal service											
Demand forecast	10,110	10,368	10,625	10,861	11,134	11,383	11,636	11,893	12,164	12,428	12,688
Labour supply forecast	10,512	10,728	10,949	11,174	11,404	11,639	11,878	12,123	12,372	12,627	12,887
Cumulative shortage*	98	140	176	187	230	244	258	270	292	301	301
G93 - Cleaners											
Demand forecast	60,901	62,101	63,301	64,301	65,401	66,401	67,601	68,701	70,001	71,101	72,201
Labour supply forecast	62,380	63,272	64,177	65,095	66,026	66,970	67,928	68,900	69,886	70,885	71,899
Cumulative shortage*	1624	1932	2227	2309	2478	2534	2776	2904	3218	3319	3405
G94 - Butchers and bakers											
Demand forecast	8,876	8,935	8,895	9,101	9,309	9,473	9,642	9,814	10,011	10,129	10,277
Labour supply forecast	9,395	9,492	9,589	9,687	9,786	9,886	9,988	10,090	10,193	10,298	10,403
Cumulative shortage*	-115	-153	-290	-182	-73	-9	58	128	222	235	278

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G96 - Food counter attendants, kitchen helpers and related occupations											
Demand forecast	33,828	34,763	35,947	36,953	37,686	38,419	39,391	40,254	41,195	41,701	42,380
Labour supply forecast	34,781	35,580	36,398	37,234	38,090	38,965	39,860	40,776	41,713	42,671	43,651
Cumulative shortage*	1151	1287	1653	1823	1700	1558	1635	1582	1586	1134	833
G97 - Other sales and related occupations											
Demand forecast	25,833	25,708	25,883	26,348	26,930	26,337	26,665	27,059	27,528	27,894	28,295
Labour supply forecast	26,896	27,094	27,293	27,493	27,695	27,898	28,103	28,310	28,517	28,727	28,938
Cumulative shortage*	240	-83	-107	158	538	-258	-135	52	314	470	660
G98 - Other elemental service occupations											
Demand forecast	7,085	7,273	7,469	7,642	7,813	7,977	8,160	8,338	8,528	8,690	8,862
Labour supply forecast	7,626	7,753	7,883	8,015	8,150	8,286	8,425	8,566	8,710	8,856	9,004
Cumulative shortage*	159	220	286	327	363	391	435	472	518	534	558
H01 - Contractors and supervisors, trades and related workers											
Demand forecast	49,513	51,018	51,835	52,613	53,503	53,773	54,879	55,301	55,556	56,219	56,794
Labour supply forecast	50,953	51,512	52,077	52,648	53,226	53,810	54,400	54,997	55,600	56,211	56,827
Cumulative shortage*	-843	103	355	562	874	560	1076	901	553	605	564
H02 - Supervisors, railway and motor transportation occupations											
Demand forecast	7,040	7,068	7,048	7,008	7,028	7,108	7,209	7,323	7,469	7,587	7,739
Labour supply forecast	7,064	7,128	7,192	7,257	7,323	7,389	7,456	7,523	7,591	7,660	7,729
Cumulative shortage*	-23	-59	-143	-248	-294	-280	-246	-199	-121	-72	11
H11 - Plumbers, pipefitters and gas fitters											
Demand forecast	17,043	17,553	17,819	18,089	18,380	18,447	18,781	18,901	18,955	19,157	19,308
Labour supply forecast	18,036	18,173	18,311	18,450	18,590	18,731	18,873	19,016	19,161	19,306	19,453
Cumulative shortage*	-194	179	307	438	589	515	707	684	593	650	654
H12 - Carpenters and cabinetmakers											
Demand forecast	17,311	18,027	18,422	18,794	19,158	19,201	19,669	19,788	19,812	20,051	20,260
Labour supply forecast	18,822	18,944	19,067	19,191	19,316	19,441	19,568	19,695	19,823	19,952	20,081
Cumulative shortage*	-309	285	557	805	1044	962	1303	1295	1191	1301	1381
H13 - Masonry and plastering trades											
Demand forecast	11,154	11,637	11,901	12,153	12,390	12,407	12,719	12,792	12,796	12,952	13,087
Labour supply forecast	12,099	12,198	12,298	12,399	12,501	12,604	12,708	12,812	12,917	13,023	13,131
Cumulative shortage*	-248	136	300	451	586	500	708	677	576	626	653
H14 - Other construction trades											
Demand forecast	16,097	16,757	17,122	17,475	17,810	17,849	18,284	18,395	18,415	18,639	18,834
Labour supply forecast	17,634	17,769	17,905	18,042	18,181	18,320	18,460	18,602	18,744	18,888	19,032
Cumulative shortage*	-334	191	420	636	832	732	1027	996	874	954	1005
H21 - Electrical trades and telecommunications occupations											
Demand forecast	32,135	32,960	33,369	33,788	34,295	34,440	34,937	35,176	35,335	35,704	35,951
Labour supply forecast	33,526	33,753	33,981	34,211	34,443	34,676	34,911	35,148	35,386	35,625	35,866
Cumulative shortage*	10	608	789	978	1253	1165	1427	1429	1350	1480	1486
H22 - Stationary engineers and power station and system operators											
Demand forecast	2,762	2,784	2,786	2,794	2,819	2,832	2,836	2,853	2,871	2,889	2,891
Labour supply forecast	2,801	2,803	2,804	2,805	2,806	2,808	2,809	2,810	2,812	2,813	2,814
Cumulative shortage*	63	83	84	91	115	126	129	145	161	178	179
H31 - Machinists and related occupations											
Demand forecast	8,062	8,121	8,139	8,152	8,244	8,332	8,426	8,502	8,581	8,660	8,738
Labour supply forecast	8,236	8,272	8,309	8,345	8,382	8,419	8,456	8,493	8,530	8,568	8,605
Cumulative shortage*	-165	-142	-161	-184	-129	-78	-21	18	60	101	142

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H32 - Metal forming, shaping and erecting trades											
Demand forecast	35,686	36,569	37,096	37,586	38,217	38,566	39,293	39,693	40,016	40,528	41,001
Labour supply forecast	37,498	37,900	38,307	38,718	39,133	39,553	39,977	40,406	40,839	41,277	41,720
Cumulative shortage*	-509	-28	92	171	387	316	619	590	480	554	584
H41 - Machinery and transportation equipment mechanics											
Demand forecast	32,440	32,857	33,059	33,254	33,647	33,985	34,498	34,887	35,289	35,728	36,156
Labour supply forecast	33,363	33,630	33,900	34,172	34,447	34,723	35,002	35,282	35,566	35,851	36,139
Cumulative shortage*	-329	-179	-247	-324	-206	-144	90	199	317	471	611
H42 - Automotive service technicians											
Demand forecast	22,375	22,708	23,008	23,278	23,725	24,149	24,607	25,052	25,545	25,999	26,455
Labour supply forecast	22,930	23,262	23,599	23,941	24,288	24,640	24,997	25,360	25,727	26,100	26,478
Cumulative shortage*	-149	-148	-185	-257	-157	-85	16	98	224	305	383
H43 - Other mechanics**											
Demand forecast	3,400	3,500	3,500	3,600	3,600	3,700	3,700	3,800	3,800	3,900	3,900
Labour supply forecast	3,442	3,484	3,526	3,569	3,613	3,657	3,702	3,747	3,793	3,840	3,887
Cumulative shortage*	-42	16	-26	31	-13	43	-2	53	7	60	13
H51 - Upholsterers, tailors, shoe repairers, jewellers and related occupations**											
Demand forecast	2,418	2,462	2,505	2,545	2,602	2,652	2,702	2,752	2,807	2,859	2,912
Labour supply forecast	2,631	2,662	2,694	2,726	2,758	2,791	2,824	2,857	2,891	2,926	2,960
Cumulative shortage*	-11	2	13	21	46	63	80	97	118	135	154
H52 - Printing press operators, commercial divers and other trades and related occupations, n.e.c.***											
Demand forecast	2,943	2,965	2,987	3,004	3,044	3,081	3,117	3,150	3,194	3,231	3,271
Labour supply forecast	3,022	3,045	3,068	3,090	3,113	3,136	3,160	3,183	3,207	3,231	3,255
Cumulative shortage*	21	20	19	14	31	45	57	67	87	100	116
H53 - Other installers, repairers and servicers											
Demand forecast	14,340	14,641	14,804	14,984	15,222	15,317	15,527	15,654	15,760	15,931	16,053
Labour supply forecast	14,735	14,871	15,008	15,147	15,286	15,428	15,570	15,714	15,859	16,005	16,153
Cumulative shortage*	-97	68	94	135	234	187	255	238	199	224	198
H61 - Heavy equipment operators											
Demand forecast	21,557	22,048	22,314	22,580	22,911	23,068	23,501	23,694	23,828	24,095	24,323
Labour supply forecast	23,655	23,709	23,764	23,819	23,874	23,929	23,985	24,040	24,096	24,152	24,207
Cumulative shortage*	-203	234	445	656	932	1034	1411	1549	1627	1838	2011
H62 - Crane operators, drillers and blasters**											
Demand forecast	2,182	2,234	2,260	2,286	2,318	2,331	2,374	2,393	2,406	2,433	2,458
Labour supply forecast	2,314	2,328	2,343	2,357	2,371	2,386	2,401	2,415	2,430	2,445	2,460
Cumulative shortage*	-29	9	20	32	50	48	76	81	79	91	101
H71 - Motor vehicle and transit drivers											
Demand forecast	69,654	69,967	69,823	69,489	69,722	70,508	71,543	72,654	74,070	75,234	76,723
Labour supply forecast	72,706	73,115	73,526	73,939	74,355	74,772	75,192	75,615	76,040	76,467	76,897
Cumulative shortage*	-155	-251	-806	-1553	-1736	-1367	-752	-64	927	1664	2723
H72 - Train crew operating occupations**											
Demand forecast	1,057	1,060	1,055	1,047	1,048	1,060	1,075	1,092	1,115	1,134	1,158
Labour supply forecast	1,093	1,098	1,103	1,108	1,113	1,117	1,123	1,127	1,131	1,138	1,143
Cumulative shortage*	1	-1	-11	-24	-28	-20	-11	2	19	33	52
H73 - Other transport equipment operators and related workers**											
Demand forecast	2,107	2,115	2,108	2,094	2,100	2,125	2,156	2,192	2,237	2,274	2,321
Labour supply forecast	2,120	2,140	2,160	2,180	2,200	2,221	2,242	2,263	2,284	2,306	2,327
Cumulative shortage*	-11	-23	-50	-84	-98	-94	-84	-69	-45	-30	-4

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H81 - Longshore workers and material handlers											
Demand forecast	20,138	20,253	20,281	20,300	20,473	20,704	21,011	21,307	21,671	21,986	22,367
Labour supply forecast	22,235	22,270	22,305	22,341	22,376	22,411	22,447	22,482	22,518	22,553	22,589
Cumulative shortage*	-197	-117	-124	-141	-3	193	464	725	1053	1333	1678
H82 - Trades helpers and labourers											
Demand forecast	22,904	23,675	24,096	24,497	24,925	25,020	25,554	25,732	25,819	26,125	26,387
Labour supply forecast	26,333	26,366	26,399	26,432	26,465	26,498	26,531	26,565	26,598	26,631	26,665
Cumulative shortage*	-131	607	995	1363	1758	1820	2321	2465	2519	2792	3020
H83 - Public works and other labourers, n.e.c.***											
Demand forecast	3,469	3,520	3,558	3,575	3,656	3,720	3,791	3,845	3,908	3,962	3,999
Labour supply forecast	3,730	3,761	3,792	3,823	3,854	3,886	3,918	3,950	3,982	4,015	4,047
Cumulative shortage*	36	56	63	49	99	131	170	192	223	244	249
I01 - Contractors, operators and supervisors in agriculture, horticulture, and aquaculture											
Demand forecast	45,528	45,493	45,424	45,375	45,380	45,373	45,368	45,320	45,304	45,299	45,285
Labour supply forecast	45,521	45,542	45,563	45,583	45,604	45,625	45,646	45,667	45,688	45,709	45,730
Cumulative shortage*	312	256	166	97	81	53	27	-42	-79	-105	-140
I02 - Agriculture and horticulture workers											
Demand forecast	11,748	11,728	11,698	11,679	11,664	11,648	11,631	11,607	11,588	11,575	11,561
Labour supply forecast	12,549	12,498	12,448	12,398	12,348	12,298	12,248	12,198	12,149	12,100	12,051
Cumulative shortage*	101	132	152	183	218	252	285	311	341	377	412
I12 - Supervisors, mining, oil and gas											
Demand forecast	17,581	17,704	17,787	17,943	18,117	18,307	18,577	18,734	18,841	19,005	19,144
Labour supply forecast	18,416	18,442	18,468	18,493	18,519	18,545	18,570	18,596	18,622	18,649	18,675
Cumulative shortage*	-348	-251	-194	-63	85	249	494	625	706	843	956
I13 - Underground miners, oil and gas drillers and related workers											
Demand forecast	20,005	20,137	20,198	20,369	20,509	20,665	20,905	21,022	21,124	21,197	21,331
Labour supply forecast	20,598	20,648	20,698	20,749	20,799	20,850	20,901	20,951	21,002	21,054	21,105
Cumulative shortage*	-50	32	43	163	253	358	547	614	665	686	769
I14 - Mine service workers and operators in oil and gas drilling											
Demand forecast	10,206	10,274	10,316	10,364	10,461	10,518	10,670	10,706	10,759	10,748	10,819
Labour supply forecast	10,508	10,538	10,568	10,598	10,628	10,658	10,689	10,719	10,749	10,780	10,811
Cumulative shortage*	-26	12	24	42	109	136	257	263	286	244	284
I16 - Logging & forestry workers**											
Demand forecast	1,117	1,136	1,154	1,164	1,196	1,218	1,244	1,257	1,271	1,284	1,289
Labour supply forecast	1,154	1,169	1,185	1,201	1,218	1,234	1,251	1,268	1,285	1,303	1,321
Cumulative shortage*	-7	-3	-1	-7	8	14	23	19	16	11	-2
I21 - Primary production labourers											
Demand forecast	18,038	18,251	18,442	18,622	18,907	19,160	19,478	19,695	19,919	20,145	20,345
Labour supply forecast	20,820	20,839	20,859	20,879	20,899	20,919	20,938	20,958	20,978	21,000	21,022
Cumulative shortage*	218	412	583	743	1008	1241	1540	1737	1941	2145	2323
J01 - Supervisors, processing occupations											
Demand forecast	8,944	9,006	8,998	9,010	9,087	9,129	9,141	9,188	9,237	9,291	9,294
Labour supply forecast	8,884	8,897	8,911	8,924	8,938	8,951	8,965	8,979	8,993	9,007	9,021
Cumulative shortage*	127	176	154	153	216	245	243	276	311	351	340
J02 - Supervisors, assembly and fabrication**											
Demand forecast	3,682	3,720	3,725	3,714	3,765	3,793	3,827	3,845	3,868	3,892	3,919
Labour supply forecast	3,733	3,735	3,738	3,740	3,743	3,745	3,748	3,750	3,752	3,754	3,756
Cumulative shortage*	-26	10	12	-1	47	73	104	120	141	163	188

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
J11 - Central control and process operators in manufacturing and processing											
Demand forecast	7,426	7,471	7,484	7,522	7,586	7,651	7,731	7,791	7,839	7,903	7,948
Labour supply forecast	7,682	7,686	7,691	7,695	7,700	7,704	7,709	7,714	7,718	7,723	7,727
Cumulative shortage*	-78	-37	-29	5	64	125	200	255	299	358	399
J13 - Machine operators and related workers in chemical, plastic and rubber processing**											
Demand forecast	4,734	4,766	4,757	4,756	4,798	4,815	4,807	4,829	4,858	4,884	4,876
Labour supply forecast	4,716	4,720	4,723	4,727	4,731	4,735	4,739	4,743	4,746	4,750	4,754
Cumulative shortage*	128	156	144	139	177	190	178	196	222	244	232
J17 - Machine operators and related workers in food, beverage and tobacco processing											
Demand forecast	6,568	6,580	6,537	6,668	6,742	6,793	6,807	6,822	6,860	6,871	6,889
Labour supply forecast	6,862	6,867	6,872	6,877	6,882	6,887	6,893	6,898	6,903	6,908	6,913
Cumulative shortage*	-134	-127	-175	-49	20	66	74	84	117	123	136
J18 - Printing machine operators and related occupations**											
Demand forecast	1,436	1,450	1,466	1,480	1,509	1,534	1,556	1,578	1,604	1,627	1,650
Labour supply forecast	1,513	1,525	1,538	1,551	1,564	1,577	1,591	1,604	1,618	1,631	1,645
Cumulative shortage*	-41	-39	-36	-35	-19	-7	1	10	22	32	41
J19 - Machining, metalworking, woodworking and related machine operators											
Demand forecast	7,580	7,630	7,630	7,611	7,714	7,785	7,845	7,896	7,960	8,015	7,971
Labour supply forecast	7,793	7,800	7,807	7,814	7,821	7,828	7,835	7,842	7,849	7,856	7,863
Cumulative shortage*	-30	13	6	-20	76	140	193	237	294	342	291
J21 - Mechanical, electrical and electronics assemblers**											
Demand forecast	3,453	3,469	3,467	3,456	3,496	3,532	3,560	3,590	3,631	3,662	3,697
Labour supply forecast	3,607	3,614	3,621	3,629	3,636	3,643	3,650	3,657	3,665	3,672	3,679
Cumulative shortage*	-56	-47	-56	-75	-42	-13	8	31	64	88	116
J22 - Other assembly and related occupations											
Demand forecast	7,101	7,177	7,196	7,192	7,293	7,357	7,436	7,488	7,551	7,613	7,584
Labour supply forecast	7,436	7,473	7,510	7,547	7,584	7,621	7,658	7,696	7,734	7,772	7,810
Cumulative shortage*	-35	4	-14	-55	9	36	78	92	117	141	74
J31 - Labourers in processing, manufacturing and utilities											
Demand forecast	10,324	10,372	10,356	10,333	10,444	10,519	10,561	10,626	10,716	10,788	10,844
Labour supply forecast	11,106	11,112	11,119	11,125	11,131	11,137	11,143	11,149	11,156	11,162	11,168
Cumulative shortage*	-77	-35	-58	-87	18	87	123	182	265	331	381

* Supply shortage if positive, supply surplus if negative. The cumulative shortages are calculated using 2012 as the base year.

** 2012 Historical data has a coefficient of variation > 16.5% and < 33.3% and should be used with caution.

*** Not elsewhere classified.

Appendix D

Results of Alberta's Occupational Demand and Supply for 4-Digit NOC-S Occupations, 2013-2023

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
A013 - Senior managers - Financial, communications and other business services**											
Demand forecast	3,259	3,293	3,310	3,331	3,387	3,424	3,474	3,506	3,557	3,589	3,622
Labour supply forecast	3,185	3,196	3,194	3,209	3,228	3,242	3,254	3,268	3,292	3,299	3,319
Cumulative shortage*	75	98	117	123	160	183	221	239	266	291	304
A111 - Financial managers											
Demand forecast	6,950	7,050	7,141	7,211	7,338	7,442	7,581	7,684	7,790	7,899	7,981
Labour supply forecast	6,978	7,035	7,095	7,150	7,209	7,270	7,345	7,411	7,473	7,546	7,605
Cumulative shortage*	67	110	141	156	224	267	331	368	412	448	471
A112 - Human resources managers**											
Demand forecast	3,565	3,620	3,681	3,725	3,805	3,862	3,932	3,989	4,057	4,112	4,162
Labour supply forecast	3,580	3,612	3,657	3,694	3,738	3,773	3,809	3,848	3,892	3,929	3,966
Cumulative shortage*	34	57	73	80	116	138	172	190	214	232	245
A113 - Purchasing managers**											
Demand forecast	1,105	1,117	1,130	1,142	1,158	1,180	1,193	1,205	1,224	1,235	1,253
Labour supply forecast	1,110	1,115	1,123	1,133	1,138	1,153	1,156	1,163	1,175	1,181	1,195
Cumulative shortage*	11	18	23	25	36	43	53	58	65	70	74
A114 - Other administrative services managers**											
Demand forecast	1,533	1,576	1,600	1,632	1,671	1,704	1,739	1,772	1,801	1,833	1,869
Labour supply forecast	1,539	1,573	1,590	1,618	1,642	1,665	1,685	1,709	1,728	1,751	1,781
Cumulative shortage*	15	24	31	35	50	60	75	84	94	103	109
A121 - Engineering managers**											
Demand forecast	2,851	2,872	2,884	2,901	2,941	2,970	3,000	3,027	3,054	3,090	3,113
Labour supply forecast	2,797	2,808	2,817	2,834	2,853	2,868	2,880	2,896	2,906	2,928	2,942
Cumulative shortage*	54	64	67	67	88	102	120	131	148	162	171
A122 - Computer and information systems managers**											
Demand forecast	4,227	4,277	4,325	4,362	4,426	4,485	4,555	4,610	4,675	4,730	4,788
Labour supply forecast	4,146	4,182	4,224	4,262	4,294	4,331	4,373	4,411	4,449	4,483	4,526
Cumulative shortage*	81	95	101	100	132	154	182	199	226	247	262
A131 - Sales, marketing and advertising managers											
Demand forecast	10,124	10,210	10,307	10,422	10,591	10,729	10,879	11,019	11,181	11,323	11,468
Labour supply forecast	10,315	10,391	10,468	10,545	10,623	10,702	10,781	10,861	10,941	11,022	11,103
Cumulative shortage*	-52	-42	-22	16	107	166	237	297	379	440	504
A141 - Facility operation and maintenance managers**											
Demand forecast	5,261	5,326	5,379	5,423	5,503	5,582	5,674	5,760	5,855	5,941	6,029
Labour supply forecast	5,308	5,341	5,374	5,408	5,441	5,475	5,509	5,544	5,578	5,613	5,648
Cumulative shortage*	28	60	80	90	137	182	240	291	352	403	456
A211 - Retail trade managers											
Demand forecast	31,062	30,847	31,116	31,801	32,517	33,033	33,525	33,969	34,357	34,742	35,094
Labour supply forecast	32,091	32,181	32,272	32,364	32,455	32,547	32,639	32,731	32,824	32,917	33,010
Cumulative shortage*	-229	-534	-356	237	862	1,286	1,686	2,038	2,333	2,625	2,884
A221 - Restaurant and food service managers											
Demand forecast	14,897	15,297	15,809	16,237	16,547	16,852	17,274	17,640	18,040	18,227	18,496
Labour supply forecast	14,423	14,771	15,117	15,473	15,850	16,228	16,614	17,009	17,412	17,830	18,253
Cumulative shortage*	601	653	819	891	824	751	787	758	755	524	370

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<i>A222 - Accommodation service managers**</i>											
Demand forecast	5,589	5,731	5,931	6,095	6,198	6,310	6,467	6,603	6,754	6,818	6,919
Labour supply forecast	5,437	5,561	5,699	5,836	5,966	6,106	6,250	6,398	6,550	6,702	6,861
Cumulative shortage*	225	243	305	332	305	277	290	278	277	189	131
<i>A301 - Insurance, real estate and financial brokerage managers**</i>											
Demand forecast	1,733	1,757	1,768	1,788	1,801	1,817	1,840	1,859	1,878	1,895	1,913
Labour supply forecast	1,642	1,671	1,693	1,726	1,748	1,772	1,799	1,827	1,850	1,878	1,905
Cumulative shortage*	102	97	86	73	64	56	52	43	39	28	19
<i>A302 - Banking, credit and other investment managers**</i>											
Demand forecast	3,467	3,503	3,537	3,556	3,592	3,624	3,669	3,708	3,755	3,781	3,815
Labour supply forecast	3,286	3,331	3,387	3,433	3,485	3,534	3,588	3,643	3,699	3,746	3,798
Cumulative shortage*	203	194	172	145	129	112	103	87	78	57	39
<i>A303 - Other business services managers**</i>											
Demand forecast	2,025	2,048	2,061	2,070	2,094	2,119	2,142	2,162	2,190	2,218	2,245
Labour supply forecast	1,919	1,948	1,973	1,998	2,032	2,066	2,095	2,124	2,157	2,198	2,235
Cumulative shortage*	119	113	101	85	75	66	60	51	46	33	23
<i>A321 - Managers in health care**</i>											
Demand forecast	2,149	2,229	2,311	2,390	2,466	2,539	2,608	2,680	2,760	2,843	2,923
Labour supply forecast	2,151	2,212	2,273	2,349	2,421	2,496	2,569	2,644	2,730	2,817	2,905
Cumulative shortage*	13	32	53	56	60	58	54	51	45	41	33
<i>A323 - School principals and administrators of elementary and secondary education**</i>											
Demand forecast	4,456	4,618	4,792	4,909	5,042	5,167	5,285	5,420	5,531	5,666	5,797
Labour supply forecast	4,461	4,582	4,712	4,824	4,951	5,081	5,207	5,347	5,471	5,614	5,762
Cumulative shortage*	26	67	111	116	122	117	109	104	91	83	66
<i>A324 - Managers in social community and correctional services**</i>											
Demand forecast	3,313	3,433	3,557	3,664	3,764	3,858	3,966	4,070	4,181	4,284	4,385
Labour supply forecast	3,316	3,407	3,498	3,601	3,696	3,793	3,907	4,015	4,135	4,245	4,359
Cumulative shortage*	20	49	82	86	91	88	82	78	69	62	49
<i>A334 - Other managers in public administration**</i>											
Demand forecast	1,639	1,685	1,733	1,764	1,827	1,879	1,931	1,969	2,012	2,050	2,071
Labour supply forecast	1,653	1,681	1,709	1,742	1,772	1,796	1,831	1,860	1,896	1,932	1,960
Cumulative shortage*	-2	16	36	34	67	95	112	121	128	130	123
<i>A361 - Other services managers**</i>											
Demand forecast	2,925	2,987	3,046	3,094	3,153	3,209	3,271	3,330	3,396	3,458	3,522
Labour supply forecast	2,879	2,938	2,999	3,060	3,123	3,188	3,253	3,320	3,388	3,458	3,529
Cumulative shortage*	67	70	68	55	51	42	39	31	29	21	14
<i>A371 - Construction managers</i>											
Demand forecast	9,930	10,262	10,446	10,580	10,745	10,790	11,026	11,120	11,186	11,329	11,479
Labour supply forecast	10,157	10,325	10,486	10,613	10,749	10,855	10,983	11,095	11,199	11,315	11,433
Cumulative shortage*	-156	8	31	38	67	6	114	96	58	85	117
<i>A372 - Residential home builders and renovators</i>											
Demand forecast	13,785	14,296	14,571	14,778	15,032	15,073	15,410	15,533	15,607	15,816	16,027
Labour supply forecast	14,101	14,385	14,627	14,825	15,039	15,165	15,350	15,499	15,625	15,796	15,963
Cumulative shortage*	-217	10	43	52	92	7	159	133	81	119	163
<i>A373 - Transportation managers**</i>											
Demand forecast	3,654	3,567	3,479	3,467	3,440	3,505	3,547	3,605	3,689	3,743	3,803
Labour supply forecast	3,738	3,590	3,493	3,478	3,442	3,527	3,534	3,597	3,694	3,739	3,788
Cumulative shortage*	-58	3	12	15	24	4	39	34	21	30	41

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
A381 - Primary production managers (except agriculture)*											
Demand forecast	7,942	7,992	8,023	8,087	7,961	8,043	8,157	8,224	8,268	8,337	8,393
Labour supply forecast	7,911	7,921	7,931	7,941	7,951	7,961	7,971	7,981	7,991	8,001	8,011
Cumulative shortage*	32	72	93	147	11	83	187	244	278	337	383
A391 - Manufacturing managers**											
Demand forecast	4,200	4,238	4,234	4,246	4,284	4,303	4,307	4,332	4,361	4,389	4,394
Labour supply forecast	4,140	4,144	4,145	4,148	4,150	4,151	4,151	4,153	4,154	4,155	4,156
Cumulative shortage*	89	123	118	127	163	181	185	208	236	263	267
B011 - Financial auditors and accountants											
Demand forecast	28,826	29,128	29,389	29,611	30,049	30,432	30,863	31,208	31,609	31,983	32,307
Labour supply forecast	28,394	28,734	29,100	29,476	29,865	30,259	30,658	31,050	31,448	31,875	32,298
Cumulative shortage*	707	669	564	410	459	448	480	433	436	383	284
B012 - Financial and investment analysts**											
Demand forecast	3,632	3,672	3,711	3,739	3,799	3,841	3,901	3,950	3,997	4,037	4,077
Labour supply forecast	3,543	3,587	3,639	3,686	3,739	3,782	3,838	3,892	3,938	3,985	4,037
Cumulative shortage*	89	85	72	53	60	59	63	58	59	52	40
B013 - Securities agents, investment dealers and brokers**											
Demand forecast	3,095	3,135	3,154	3,172	3,210	3,243	3,283	3,311	3,349	3,379	3,401
Labour supply forecast	3,019	3,063	3,093	3,127	3,160	3,194	3,230	3,262	3,300	3,335	3,367
Cumulative shortage*	76	72	61	45	50	49	53	49	49	44	34
B014 - Other financial officers											
Demand forecast	13,851	14,012	14,127	14,219	14,397	14,558	14,728	14,881	15,062	15,199	15,323
Labour supply forecast	13,644	13,822	13,988	14,154	14,309	14,475	14,630	14,806	14,986	15,148	15,319
Cumulative shortage*	333	316	265	191	214	209	224	201	202	177	130
B021 - Specialists in human resources											
Demand forecast	6,027	6,129	6,225	6,300	6,424	6,530	6,646	6,744	6,858	6,960	7,042
Labour supply forecast	6,105	6,203	6,301	6,395	6,487	6,575	6,667	6,756	6,846	6,937	7,019
Cumulative shortage*	122	126	124	105	137	155	179	188	212	223	223
B022 - Professional occupations in business services to management											
Demand forecast	18,132	18,326	18,505	18,640	18,932	19,191	19,466	19,702	19,984	20,229	20,457
Labour supply forecast	17,967	18,144	18,324	18,511	18,703	18,903	19,103	19,308	19,515	19,725	19,947
Cumulative shortage*	365	382	381	329	429	488	563	594	669	704	710
B111 - Bookkeepers											
Demand forecast	24,017	24,354	24,617	24,836	25,181	25,464	25,858	26,156	26,509	26,845	27,190
Labour supply forecast	23,853	24,158	24,464	24,768	25,089	25,383	25,697	25,995	26,300	26,631	26,958
Cumulative shortage*	566	598	555	470	494	483	563	563	611	616	634
B112 - Loan officers											
Demand forecast	5,913	5,975	6,021	6,053	6,110	6,170	6,251	6,321	6,395	6,459	6,528
Labour supply forecast	5,704	5,756	5,811	5,863	5,913	5,973	6,033	6,101	6,162	6,223	6,286
Cumulative shortage*	303	313	304	284	291	291	312	314	327	330	336
B113 - Insurance adjusters and claims examiners**											
Demand forecast	5,165	5,227	5,263	5,297	5,352	5,403	5,474	5,534	5,607	5,660	5,719
Labour supply forecast	5,130	5,185	5,230	5,282	5,332	5,386	5,440	5,500	5,563	5,615	5,670
Cumulative shortage*	117	124	115	97	102	99	116	116	126	127	131
B115 - Assessors, valuers and appraisers**											
Demand forecast	1,265	1,284	1,302	1,320	1,340	1,359	1,379	1,407	1,427	1,447	1,466
Labour supply forecast	1,258	1,275	1,296	1,318	1,337	1,356	1,372	1,400	1,418	1,437	1,455
Cumulative shortage*	29	31	28	24	25	25	29	29	31	32	33

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
B211 - Secretaries (except legal and medical)											
Demand forecast	9,679	9,868	10,019	10,163	10,334	10,486	10,679	10,838	10,997	11,154	11,305
Labour supply forecast	9,861	10,029	10,189	10,373	10,543	10,726	10,912	11,104	11,288	11,470	11,656
Cumulative shortage*	39	60	51	11	12	-19	-12	-45	-70	-95	-130
B212 - Legal secretaries**											
Demand forecast	1,255	1,262	1,277	1,273	1,292	1,302	1,320	1,329	1,346	1,364	1,380
Labour supply forecast	1,250	1,253	1,269	1,270	1,288	1,302	1,318	1,331	1,350	1,371	1,391
Cumulative shortage*	5	9	8	3	4	0	2	-2	-4	-7	-11
B213 - Medical secretaries**											
Demand forecast	1,733	1,799	1,861	1,914	1,972	2,022	2,079	2,136	2,192	2,246	2,310
Labour supply forecast	1,766	1,829	1,893	1,954	2,012	2,069	2,125	2,189	2,251	2,310	2,382
Cumulative shortage*	7	10	8	0	0	-7	-6	-13	-19	-24	-32
B214 - Court recorders and medical transcriptionists**											
Demand forecast	1,763	1,809	1,851	1,885	1,933	1,973	2,020	2,057	2,103	2,158	2,202
Labour supply forecast	1,797	1,839	1,883	1,925	1,973	2,019	2,065	2,108	2,159	2,220	2,271
Cumulative shortage*	6	10	8	0	0	-6	-5	-11	-16	-22	-29
B311 - Administrative officers											
Demand forecast	32,026	32,637	33,161	33,612	34,266	34,789	35,476	35,988	36,516	37,047	37,520
Labour supply forecast	32,514	33,003	33,486	33,999	34,469	34,939	35,457	35,962	36,458	36,982	37,513
Cumulative shortage*	312	434	475	413	597	650	819	826	858	865	807
B312 - Executive assistants											
Demand forecast	5,466	5,566	5,657	5,723	5,843	5,944	6,055	6,144	6,252	6,342	6,418
Labour supply forecast	5,577	5,657	5,741	5,818	5,907	6,000	6,082	6,170	6,274	6,363	6,449
Cumulative shortage*	89	109	116	105	136	144	173	174	178	179	169
B313 - Personnel and recruitment officers**											
Demand forecast	3,621	3,681	3,731	3,779	3,852	3,919	3,986	4,046	4,104	4,174	4,226
Labour supply forecast	3,581	3,623	3,663	3,713	3,760	3,815	3,858	3,912	3,960	4,023	4,076
Cumulative shortage*	40	58	68	66	92	104	128	134	144	151	150
B314 - Property administrators**											
Demand forecast	4,389	4,449	4,499	4,537	4,602	4,661	4,730	4,788	4,847	4,897	4,947
Labour supply forecast	4,663	4,708	4,754	4,803	4,845	4,899	4,947	5,007	5,064	5,116	5,176
Cumulative shortage*	26	41	45	34	57	62	83	81	83	81	71
B315 - Purchasing agents and officers											
Demand forecast	7,012	7,092	7,143	7,189	7,303	7,387	7,491	7,569	7,636	7,716	7,780
Labour supply forecast	7,041	7,093	7,134	7,192	7,266	7,338	7,405	7,481	7,541	7,618	7,694
Cumulative shortage*	71	99	109	97	137	149	186	188	195	198	186
B316 - Conference and event planners**											
Demand forecast	2,403	2,453	2,513	2,551	2,620	2,675	2,739	2,779	2,838	2,877	2,911
Labour supply forecast	2,379	2,419	2,475	2,516	2,570	2,620	2,670	2,708	2,763	2,801	2,838
Cumulative shortage*	24	34	38	35	50	55	69	71	75	76	73
B318 - Immigration, unemployment insurance and revenue officers**											
Demand forecast	1,566	1,616	1,666	1,695	1,751	1,794	1,838	1,877	1,927	1,967	2,013
Labour supply forecast	1,521	1,563	1,610	1,640	1,685	1,724	1,758	1,794	1,841	1,879	1,926
Cumulative shortage*	45	53	56	55	66	70	80	83	86	88	87
B411 - Supervisors, general office and administrative support clerks**											
Demand forecast	3,493	3,582	3,653	3,695	3,769	3,833	3,919	3,991	4,066	4,149	4,220
Labour supply forecast	3,571	3,663	3,749	3,817	3,881	3,933	3,999	4,057	4,109	4,178	4,236
Cumulative shortage*	22	19	4	-22	-12	0	20	34	57	71	84

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
B412 - Supervisors, finance and insurance clerks**											
Demand forecast	7,428	7,548	7,620	7,651	7,750	7,850	7,972	8,077	8,198	8,294	8,396
Labour supply forecast	7,585	7,710	7,811	7,894	7,971	8,045	8,124	8,202	8,274	8,343	8,417
Cumulative shortage*	43	38	9	-43	-21	5	48	75	124	151	179
B413 - Supervisors, library, correspondence and related information clerks**											
Demand forecast	2,292	2,328	2,359	2,377	2,410	2,453	2,497	2,538	2,592	2,623	2,664
Labour supply forecast	2,276	2,313	2,352	2,385	2,411	2,445	2,475	2,507	2,544	2,566	2,597
Cumulative shortage*	16	15	7	-8	-1	8	22	31	48	57	67
B414 - Supervisors, mail and message distribution occupations**											
Demand forecast	1,712	1,656	1,626	1,628	1,639	1,672	1,705	1,726	1,758	1,790	1,820
Labour supply forecast	1,718	1,663	1,638	1,651	1,657	1,684	1,708	1,723	1,744	1,770	1,793
Cumulative shortage*	-6	-7	-12	-23	-18	-12	-3	3	14	20	27
B415 - Supervisors, recording, distributing and scheduling occupations											
Demand forecast	9,179	9,243	9,276	9,289	9,419	9,541	9,676	9,811	9,974	10,112	10,254
Labour supply forecast	9,312	9,380	9,447	9,522	9,625	9,715	9,797	9,898	10,001	10,105	10,213
Cumulative shortage*	67	63	29	-33	-6	26	79	113	173	207	241
B511 - General office clerks**											
Demand forecast	3,055	3,103	3,138	3,171	3,226	3,271	3,324	3,371	3,410	3,459	3,500
Labour supply forecast	3,125	3,145	3,160	3,182	3,207	3,233	3,261	3,290	3,308	3,338	3,366
Cumulative shortage*	39	67	87	98	128	147	172	190	211	230	243
B513 - Records management and filing clerks											
Demand forecast	6,121	6,226	6,326	6,401	6,530	6,639	6,756	6,859	6,965	7,083	7,174
Labour supply forecast	6,260	6,311	6,370	6,423	6,492	6,562	6,627	6,695	6,757	6,836	6,900
Cumulative shortage*	79	133	174	196	256	295	347	382	426	465	492
B514 - Receptionists and switchboard operators											
Demand forecast	25,574	26,140	26,652	27,092	27,679	28,181	28,743	29,240	29,794	30,307	30,789
Labour supply forecast	26,223	26,564	26,907	27,255	27,587	27,924	28,267	28,612	28,979	29,323	29,688
Cumulative shortage*	325	550	719	811	1,066	1,231	1,450	1,602	1,789	1,958	2,075
B522 - Data entry clerks											
Demand forecast	8,112	8,235	8,333	8,418	8,575	8,695	8,849	8,982	9,124	9,259	9,381
Labour supply forecast	8,277	8,363	8,439	8,526	8,615	8,686	8,777	8,868	8,951	9,044	9,138
Cumulative shortage*	133	170	192	190	258	307	370	412	471	513	541
B531 - Accounting and related clerks											
Demand forecast	24,422	24,736	24,989	25,214	25,597	25,933	26,341	26,681	27,062	27,414	27,755
Labour supply forecast	24,544	24,812	25,094	25,388	25,695	26,001	26,313	26,625	26,938	27,271	27,606
Cumulative shortage*	655	701	672	603	679	709	805	833	901	920	926
B532 - Payroll clerks											
Demand forecast	6,357	6,476	6,564	6,640	6,761	6,855	6,968	7,065	7,163	7,253	7,343
Labour supply forecast	6,389	6,496	6,592	6,686	6,787	6,873	6,961	7,050	7,130	7,215	7,304
Cumulative shortage*	172	184	176	158	178	186	211	219	237	242	243
B533 - Customer service representatives - financial services											
Demand forecast	12,885	13,032	13,128	13,210	13,353	13,491	13,655	13,800	13,965	14,087	14,207
Labour supply forecast	12,949	13,072	13,183	13,301	13,404	13,526	13,640	13,771	13,901	14,013	14,130
Cumulative shortage*	321	345	330	294	334	350	400	414	449	459	462
B534 - Banking, insurance and other financial clerks**											
Demand forecast	3,892	3,931	3,960	3,988	4,025	4,067	4,119	4,157	4,206	4,246	4,280
Labour supply forecast	3,789	3,820	3,852	3,890	3,914	3,950	3,986	4,018	4,056	4,091	4,124
Cumulative shortage*	103	111	108	98	111	117	133	139	150	155	156

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
B535 - Collectors**											
Demand forecast	1,258	1,267	1,287	1,286	1,308	1,319	1,340	1,349	1,369	1,389	1,407
Labour supply forecast	1,259	1,266	1,287	1,290	1,308	1,317	1,333	1,341	1,357	1,376	1,394
Cumulative shortage*	33	35	34	30	34	36	41	42	46	47	47
B541 - Administrative clerks											
Demand forecast	30,985	31,658	32,285	32,768	33,605	34,287	35,062	35,660	36,316	36,927	37,445
Labour supply forecast	31,388	31,993	32,597	33,223	33,861	34,510	35,177	35,842	36,533	37,227	37,946
Cumulative shortage*	97	165	188	45	244	277	385	318	283	200	-1
B553 - Customer service, information and related clerks											
Demand forecast	15,121	15,294	15,445	15,566	15,862	16,094	16,327	16,534	16,783	17,004	17,175
Labour supply forecast	15,619	15,707	15,782	15,862	15,963	16,067	16,168	16,274	16,385	16,505	16,614
Cumulative shortage*	202	287	363	404	599	727	859	960	1,098	1,199	1,261
B561 - Mail, postal and related clerks**											
Demand forecast	4,856	4,892	4,913	4,841	4,830	4,887	4,959	5,044	5,147	5,229	5,342
Labour supply forecast	4,987	5,039	5,109	5,100	5,109	5,145	5,182	5,222	5,257	5,291	5,331
Cumulative shortage*	-31	-47	-96	-159	-179	-158	-123	-78	-10	38	111
B562 - Letter carriers**											
Demand forecast	3,193	3,150	3,053	3,026	3,002	3,038	3,079	3,122	3,190	3,248	3,308
Labour supply forecast	3,235	3,202	3,133	3,145	3,133	3,155	3,175	3,189	3,215	3,242	3,257
Cumulative shortage*	58	48	20	-19	-31	-17	4	33	75	106	151
B563 - Couriers, messengers and door-to-door distributors**											
Demand forecast	4,639	4,694	4,736	4,759	4,830	4,887	4,959	5,044	5,147	5,229	5,342
Labour supply forecast	4,768	4,840	4,930	5,018	5,114	5,149	5,186	5,226	5,261	5,295	5,336
Cumulative shortage*	-29	-46	-94	-159	-184	-162	-127	-82	-14	34	106
B571 - Shippers and receivers											
Demand forecast	15,768	15,855	15,891	15,969	16,144	16,342	16,560	16,798	17,079	17,313	17,566
Labour supply forecast	16,450	16,592	16,719	16,891	17,027	17,180	17,324	17,501	17,679	17,849	18,021
Cumulative shortage*	-282	-337	-428	-522	-483	-438	-364	-303	-200	-136	-55
B572 - Storekeepers and parts clerks**											
Demand forecast	3,393	3,422	3,436	3,458	3,488	3,544	3,602	3,656	3,729	3,792	3,854
Labour supply forecast	3,758	3,801	3,838	3,883	3,905	3,955	4,000	4,043	4,098	4,150	4,197
Cumulative shortage*	-65	-79	-102	-125	-117	-111	-98	-87	-69	-58	-43
B573 - Production clerks**											
Demand forecast	2,987	3,017	3,040	3,071	3,109	3,135	3,182	3,205	3,237	3,270	3,302
Labour supply forecast	3,040	3,080	3,120	3,169	3,199	3,215	3,247	3,257	3,269	3,288	3,304
Cumulative shortage*	-53	-63	-80	-98	-90	-80	-65	-52	-32	-18	-2
B574 - Purchasing and inventory clerks**											
Demand forecast	5,065	5,104	5,119	5,157	5,222	5,291	5,373	5,459	5,553	5,627	5,721
Labour supply forecast	5,256	5,312	5,357	5,425	5,478	5,532	5,591	5,657	5,717	5,770	5,838
Cumulative shortage*	-91	-108	-138	-168	-156	-141	-118	-98	-64	-43	-17
B575 - Dispatchers and radio operators**											
Demand forecast	3,660	3,689	3,733	3,706	3,797	3,863	3,932	3,997	4,059	4,123	4,186
Labour supply forecast	3,725	3,766	3,831	3,824	3,906	3,961	4,013	4,062	4,099	4,146	4,189
Cumulative shortage*	-65	-77	-98	-118	-109	-98	-81	-65	-40	-23	-3
C013 - Geologists, geochemists and geophysicists**											
Demand forecast	5,406	5,432	5,464	5,503	5,573	5,640	5,720	5,780	5,821	5,871	5,912
Labour supply forecast	5,530	5,545	5,572	5,603	5,635	5,670	5,704	5,745	5,763	5,791	5,818
Cumulative shortage*	18	29	34	42	80	112	158	177	200	222	236

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
C021 - Biologists and related scientists**											
Demand forecast	3,105	3,161	3,222	3,272	3,364	3,437	3,523	3,578	3,644	3,705	3,735
Labour supply forecast	3,109	3,137	3,164	3,196	3,224	3,252	3,283	3,312	3,343	3,374	3,402
Cumulative shortage*	75	103	137	155	219	264	319	345	380	410	412
C031 - Civil engineers											
Demand forecast	8,288	8,396	8,478	8,548	8,662	8,753	8,870	8,959	9,066	9,174	9,268
Labour supply forecast	8,293	8,383	8,474	8,561	8,635	8,706	8,794	8,866	8,934	9,013	9,092
Cumulative shortage*	204	222	213	196	236	256	285	302	341	370	385
C032 - Mechanical engineers											
Demand forecast	8,869	8,927	8,968	8,998	9,092	9,173	9,259	9,338	9,436	9,523	9,597
Labour supply forecast	8,874	8,913	8,964	9,012	9,064	9,124	9,180	9,241	9,299	9,357	9,415
Cumulative shortage*	220	239	229	211	253	274	304	322	362	391	407
C033 - Electrical and electronics engineers**											
Demand forecast	4,750	4,789	4,804	4,819	4,871	4,912	4,954	4,994	5,052	5,101	5,147
Labour supply forecast	4,752	4,781	4,801	4,826	4,856	4,886	4,912	4,942	4,978	5,011	5,049
Cumulative shortage*	118	128	123	113	135	146	162	172	194	210	218
C034 - Chemical engineers**											
Demand forecast	2,365	2,384	2,392	2,400	2,430	2,451	2,467	2,487	2,516	2,535	2,548
Labour supply forecast	2,366	2,380	2,391	2,404	2,422	2,438	2,446	2,461	2,479	2,491	2,499
Cumulative shortage*	59	64	61	56	68	73	81	86	97	104	109
C043 - Mining engineers**											
Demand forecast	282	281	281	281	290	291	290	300	299	299	300
Labour supply forecast	289	287	287	286	294	292	289	297	296	294	293
Cumulative shortage*	0	1	1	2	3	6	8	10	10	12	14
C045 - Petroleum engineers											
Demand forecast	10,117	10,153	10,180	10,254	10,344	10,466	10,594	10,702	10,722	10,836	10,949
Labour supply forecast	10,370	10,393	10,405	10,466	10,483	10,531	10,586	10,622	10,630	10,672	10,714
Cumulative shortage*	15	28	43	56	129	203	276	348	360	432	503
C048 - Other professional engineers n.e.c.**(*)											
Demand forecast	1,858	1,884	1,922	1,941	1,981	2,014	2,042	2,086	2,114	2,149	2,194
Labour supply forecast	1,904	1,928	1,964	1,981	2,007	2,026	2,040	2,070	2,096	2,116	2,147
Cumulative shortage*	1	3	5	7	21	35	49	63	65	80	94
C051 - Architects**											
Demand forecast	3,256	3,284	3,316	3,333	3,383	3,427	3,477	3,508	3,557	3,592	3,629
Labour supply forecast	3,229	3,246	3,268	3,288	3,307	3,333	3,358	3,380	3,409	3,430	3,460
Cumulative shortage*	108	119	129	126	157	175	200	209	229	243	250
C053 - Urban and land use planners**											
Demand forecast	1,522	1,555	1,586	1,614	1,654	1,687	1,722	1,752	1,782	1,809	1,833
Labour supply forecast	1,512	1,540	1,566	1,595	1,620	1,644	1,666	1,691	1,711	1,731	1,751
Cumulative shortage*	51	56	61	60	75	84	97	102	112	119	123
C054 - Land surveyors**											
Demand forecast	3,121	3,154	3,182	3,199	3,253	3,290	3,338	3,370	3,413	3,446	3,476
Labour supply forecast	3,095	3,118	3,137	3,156	3,181	3,201	3,224	3,248	3,271	3,292	3,315
Cumulative shortage*	105	115	124	122	151	168	193	201	221	233	240
C071 - Information systems analysts and consultants											
Demand forecast	19,022	19,237	19,424	19,577	19,877	20,149	20,441	20,690	20,993	21,269	21,519
Labour supply forecast	19,040	19,250	19,448	19,657	19,869	20,084	20,306	20,521	20,734	20,962	21,185
Cumulative shortage*	468	473	462	406	494	551	621	655	745	793	820

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
C072 - Database analysts and data administrators**											
Demand forecast	2,897	2,936	2,971	3,006	3,053	3,095	3,144	3,191	3,238	3,278	3,320
Labour supply forecast	2,919	2,958	2,995	3,038	3,072	3,106	3,144	3,186	3,219	3,252	3,290
Cumulative shortage*	52	52	50	42	55	63	74	79	93	100	104
C073 - Software engineers and designers**											
Demand forecast	3,237	3,257	3,281	3,295	3,334	3,376	3,415	3,451	3,499	3,538	3,580
Labour supply forecast	3,240	3,259	3,285	3,309	3,333	3,365	3,393	3,423	3,456	3,487	3,525
Cumulative shortage*	79	80	78	68	83	93	104	110	125	133	137
C074 - Computer programmers and interactive media developers											
Demand forecast	11,679	11,796	11,906	11,993	12,164	12,321	12,486	12,623	12,813	12,961	13,100
Labour supply forecast	11,689	11,803	11,920	12,041	12,158	12,280	12,403	12,519	12,654	12,773	12,896
Cumulative shortage*	285	288	281	247	301	336	378	399	454	483	499
C075 - Web designers and developers**											
Demand forecast	2,208	2,237	2,273	2,289	2,335	2,366	2,395	2,433	2,471	2,510	2,544
Labour supply forecast	2,210	2,238	2,275	2,298	2,334	2,358	2,379	2,413	2,440	2,473	2,504
Cumulative shortage*	53	54	53	46	56	63	71	75	86	92	95
C111 - Applied chemical technologists and technicians**											
Demand forecast	1,950	1,973	1,986	1,994	2,020	2,042	2,068	2,086	2,107	2,130	2,146
Labour supply forecast	1,972	1,985	1,991	1,993	1,999	2,004	2,010	2,016	2,021	2,030	2,036
Cumulative shortage*	25	35	42	48	68	85	105	117	133	147	157
C112 - Geological and mineral technologists and technicians**											
Demand forecast	3,541	3,565	3,591	3,618	3,668	3,713	3,762	3,799	3,841	3,877	3,908
Labour supply forecast	3,564	3,552	3,548	3,546	3,542	3,538	3,533	3,529	3,525	3,517	3,512
Cumulative shortage*	64	100	130	159	213	262	316	357	403	447	483
C125 - Landscape and horticultural technicians and specialists**											
Demand forecast	1,556	1,582	1,616	1,635	1,682	1,721	1,759	1,788	1,820	1,837	1,856
Labour supply forecast	1,567	1,582	1,603	1,623	1,640	1,661	1,677	1,699	1,721	1,733	1,756
Cumulative shortage*	26	37	50	49	79	97	119	126	136	141	137
C131 - Civil engineering technologists and technicians**											
Demand forecast	5,642	5,742	5,824	5,885	5,977	6,041	6,147	6,203	6,269	6,352	6,423
Labour supply forecast	5,728	5,749	5,795	5,827	5,858	5,904	5,945	5,982	6,029	6,075	6,121
Cumulative shortage*	51	130	166	195	256	274	339	358	377	414	439
C132 - Mechanical engineering technologists and technicians**											
Demand forecast	1,307	1,321	1,334	1,344	1,369	1,378	1,402	1,411	1,427	1,438	1,444
Labour supply forecast	1,331	1,326	1,331	1,334	1,345	1,350	1,360	1,364	1,376	1,379	1,380
Cumulative shortage*	12	31	39	46	60	64	78	83	87	95	100
C134 - Construction estimators**											
Demand forecast	1,980	2,056	2,091	2,131	2,169	2,177	2,222	2,241	2,246	2,267	2,291
Labour supply forecast	2,010	2,059	2,081	2,110	2,126	2,128	2,149	2,161	2,160	2,168	2,183
Cumulative shortage*	20	47	60	71	93	99	123	130	136	149	158
C141 - Electrical and electronics engineering technologists and technicians**											
Demand forecast	1,499	1,517	1,525	1,534	1,560	1,578	1,595	1,611	1,626	1,647	1,659
Labour supply forecast	1,523	1,534	1,540	1,548	1,562	1,573	1,582	1,592	1,598	1,611	1,619
Cumulative shortage*	13	20	22	23	35	42	50	56	65	73	77
C142 - Electronic service technicians (household and business equipment)											
Demand forecast	8,373	8,481	8,578	8,655	8,777	8,889	9,016	9,137	9,279	9,400	9,517
Labour supply forecast	8,510	8,577	8,664	8,734	8,789	8,864	8,944	9,027	9,121	9,196	9,287
Cumulative shortage*	66	107	117	124	191	228	275	313	361	407	433

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
C143 - Industrial instrument technicians and mechanics**											
Demand forecast	4,142	4,186	4,200	4,229	4,295	4,331	4,370	4,401	4,429	4,470	4,490
Labour supply forecast	4,210	4,233	4,242	4,268	4,301	4,319	4,335	4,348	4,354	4,373	4,382
Cumulative shortage*	36	57	62	65	98	116	139	157	179	201	212
C153 - Drafting technologists and technicians**											
Demand forecast	6,021	6,076	6,112	6,150	6,225	6,287	6,355	6,405	6,476	6,541	6,606
Labour supply forecast	5,977	6,017	6,046	6,091	6,127	6,167	6,203	6,240	6,277	6,319	6,366
Cumulative shortage*	189	204	211	204	243	265	297	310	344	367	385
C154 - Survey technologists and technicians**											
Demand forecast	1,983	2,001	2,020	2,033	2,057	2,078	2,111	2,127	2,157	2,175	2,204
Labour supply forecast	1,968	1,981	1,998	2,013	2,024	2,038	2,060	2,072	2,090	2,101	2,124
Cumulative shortage*	62	67	69	67	80	87	98	102	114	121	127
C155 - Mapping and related technologists and technicians**											
Demand forecast	2,193	2,221	2,250	2,273	2,318	2,349	2,382	2,418	2,459	2,497	2,525
Labour supply forecast	2,177	2,199	2,225	2,251	2,281	2,304	2,324	2,355	2,383	2,412	2,433
Cumulative shortage*	68	74	77	74	89	97	110	115	128	137	144
C161 - Non-destructive testers and inspectors**											
Demand forecast	3,888	3,931	3,955	3,976	4,032	4,070	4,127	4,161	4,201	4,240	4,269
Labour supply forecast	3,974	4,000	4,022	4,050	4,078	4,106	4,137	4,169	4,204	4,237	4,270
Cumulative shortage*	9	26	28	21	49	59	85	87	92	98	94
C163 - Inspectors in public and environmental health and occupational health and safety											
Demand forecast	10,093	10,233	10,352	10,448	10,641	10,792	10,972	11,112	11,251	11,388	11,499
Labour supply forecast	10,315	10,412	10,526	10,640	10,761	10,888	10,999	11,133	11,258	11,378	11,500
Cumulative shortage*	27	70	75	57	129	153	222	228	242	259	248
C164 - Construction inspectors**											
Demand forecast	4,097	4,191	4,255	4,295	4,372	4,421	4,509	4,553	4,603	4,662	4,709
Labour supply forecast	4,142	4,219	4,280	4,327	4,374	4,413	4,472	4,513	4,556	4,608	4,659
Cumulative shortage*	55	72	75	68	98	108	137	140	147	154	150
C171 - Air pilots, flight engineers and flying instructors**											
Demand forecast	2,272	2,278	2,266	2,303	2,313	2,332	2,368	2,410	2,462	2,505	2,547
Labour supply forecast	2,327	2,333	2,337	2,341	2,353	2,355	2,365	2,377	2,386	2,398	2,409
Cumulative shortage*	2	2	-14	19	17	34	60	90	133	164	195
C181 - Computer network technicians**											
Demand forecast	4,729	4,792	4,862	4,924	5,006	5,084	5,169	5,237	5,316	5,395	5,462
Labour supply forecast	4,717	4,729	4,748	4,769	4,774	4,784	4,798	4,802	4,806	4,816	4,819
Cumulative shortage*	127	178	229	270	347	415	486	550	625	694	758
C182 - User support technicians**											
Demand forecast	8,226	8,315	8,404	8,469	8,606	8,730	8,852	8,968	9,110	9,233	9,352
Labour supply forecast	8,284	8,365	8,448	8,525	8,614	8,707	8,794	8,888	8,989	9,086	9,186
Cumulative shortage*	141	149	155	143	191	222	257	279	320	346	365
C183 - Systems testing technicians**											
Demand forecast	1,242	1,260	1,270	1,281	1,306	1,319	1,337	1,357	1,374	1,386	1,403
Labour supply forecast	1,248	1,260	1,264	1,273	1,286	1,289	1,297	1,309	1,315	1,318	1,328
Cumulative shortage*	25	31	37	39	51	61	71	79	90	99	106
D011 - Specialist physicians**											
Demand forecast	1,938	1,988	2,035	2,081	2,119	2,164	2,199	2,237	2,282	2,319	2,356
Labour supply forecast	1,910	1,913	1,917	1,924	1,932	1,949	1,954	1,962	1,973	1,977	1,981
Cumulative shortage*	28	75	118	157	187	215	245	275	309	342	375

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
D012 - General practitioners and family physicians**											
Demand forecast	5,116	5,351	5,571	5,789	5,972	6,146	6,343	6,536	6,743	6,966	7,192
Labour supply forecast	5,142	5,253	5,353	5,459	5,555	5,645	5,750	5,847	5,947	6,057	6,167
Cumulative shortage*	74	198	318	430	517	601	693	789	896	1,009	1,125
D013 - Dentists**											
Demand forecast	2,158	2,249	2,347	2,435	2,514	2,590	2,667	2,757	2,844	2,934	3,025
Labour supply forecast	2,145	2,184	2,231	2,271	2,313	2,353	2,391	2,440	2,481	2,523	2,566
Cumulative shortage*	13	65	116	164	201	237	276	317	363	411	459
D014 - Veterinarians**											
Demand forecast	955	966	977	986	1,000	1,013	1,028	1,041	1,059	1,075	1,093
Labour supply forecast	941	930	920	912	912	912	914	913	916	916	919
Cumulative shortage*	14	36	57	74	88	101	114	128	143	159	174
D031 - Pharmacists**											
Demand forecast	4,187	4,174	4,262	4,364	4,463	4,557	4,658	4,763	4,879	4,983	5,102
Labour supply forecast	4,234	4,256	4,281	4,302	4,329	4,368	4,415	4,459	4,507	4,546	4,598
Cumulative shortage*	-47	-82	-19	62	134	189	243	304	372	437	504
D032 - Dietitians and Nutritionists**											
Demand forecast	1,215	1,246	1,305	1,374	1,437	1,484	1,522	1,567	1,612	1,665	1,707
Labour supply forecast	1,229	1,271	1,311	1,355	1,394	1,422	1,443	1,467	1,489	1,519	1,538
Cumulative shortage*	-14	-25	-6	19	43	62	79	100	123	146	169
D042 - Physiotherapists**											
Demand forecast	3,477	3,578	3,671	3,770	3,850	3,927	4,014	4,096	4,184	4,275	4,360
Labour supply forecast	3,499	3,528	3,554	3,595	3,637	3,681	3,730	3,772	3,816	3,862	3,900
Cumulative shortage*	39	111	178	236	274	307	345	385	429	474	521
D043 - Occupational therapists**											
Demand forecast	1,954	2,052	2,151	2,239	2,312	2,393	2,471	2,556	2,645	2,737	2,836
Labour supply forecast	1,974	2,031	2,091	2,144	2,193	2,252	2,305	2,363	2,422	2,482	2,547
Cumulative shortage*	14	55	94	129	153	175	200	227	257	289	323
D111 - Head nurses and supervisors**											
Demand forecast	3,069	3,189	3,310	3,429	3,531	3,621	3,723	3,832	3,943	4,053	4,172
Labour supply forecast	3,059	3,120	3,187	3,259	3,330	3,393	3,464	3,540	3,614	3,686	3,765
Cumulative shortage*	10	69	123	170	201	228	259	292	329	367	407
D112 - Registered nurses											
Demand forecast	35,343	36,762	38,144	39,456	40,595	41,718	42,893	44,106	45,387	46,716	48,054
Labour supply forecast	35,535	36,285	37,046	37,820	38,612	39,429	40,258	41,100	41,964	42,850	43,748
Cumulative shortage*	108	777	1,398	1,936	2,283	2,589	2,935	3,306	3,723	4,166	4,606
D212 - Medical laboratory technicians**											
Demand forecast	4,387	4,588	4,769	4,958	5,110	5,260	5,419	5,587	5,757	5,936	6,114
Labour supply forecast	4,486	4,630	4,758	4,905	5,034	5,167	5,304	5,448	5,588	5,734	5,880
Cumulative shortage*	25	82	135	177	200	217	239	263	293	326	358
D213 - Animal health technologists**											
Demand forecast	2,636	2,669	2,695	2,725	2,762	2,797	2,836	2,869	2,924	2,963	3,006
Labour supply forecast	2,695	2,693	2,689	2,696	2,721	2,748	2,776	2,798	2,838	2,862	2,891
Cumulative shortage*	13	48	78	101	113	121	132	143	158	173	187
D215 - Medical radiation technologists**											
Demand forecast	2,248	2,339	2,434	2,524	2,600	2,675	2,755	2,839	2,924	3,014	3,108
Labour supply forecast	2,234	2,294	2,360	2,427	2,490	2,554	2,621	2,691	2,758	2,830	2,905
Cumulative shortage*	14	45	74	97	110	121	134	148	166	184	203

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
D222 - Dental hygienists and therapists**											
Demand forecast	2,443	2,562	2,672	2,777	2,870	2,966	3,060	3,156	3,263	3,370	3,481
Labour supply forecast	2,545	2,621	2,692	2,765	2,834	2,910	2,982	3,054	3,132	3,209	3,289
Cumulative shortage*	-2	41	80	112	136	156	178	202	231	261	292
D233 - Licensed practical nurses											
Demand forecast	7,133	7,430	7,720	7,991	8,243	8,478	8,729	8,979	9,244	9,525	9,801
Labour supply forecast	7,337	7,543	7,750	7,960	8,169	8,378	8,595	8,815	9,042	9,284	9,527
Cumulative shortage*	-23	68	151	212	255	281	315	345	383	422	455
D234 - Ambulance attendants and other paramedical occupations**											
Demand forecast	5,721	5,936	6,145	6,347	6,534	6,716	6,895	7,086	7,280	7,489	7,693
Labour supply forecast	5,869	6,011	6,153	6,306	6,459	6,619	6,772	6,938	7,103	7,281	7,459
Cumulative shortage*	-3	70	137	186	220	242	268	293	322	353	379
D235 - Other technical occupations in therapy and assessment**											
Demand forecast	3,014	3,117	3,232	3,332	3,421	3,498	3,592	3,682	3,774	3,858	3,940
Labour supply forecast	3,092	3,156	3,236	3,310	3,382	3,448	3,528	3,605	3,682	3,750	3,820
Cumulative shortage*	-3	36	71	97	114	125	139	152	167	183	195
D311 - Dental assistants**											
Demand forecast	5,785	5,876	5,965	6,069	6,198	6,325	6,436	6,551	6,655	6,763	6,865
Labour supply forecast	6,107	6,150	6,196	6,263	6,354	6,445	6,521	6,604	6,677	6,754	6,830
Cumulative shortage*	-6	42	85	122	160	196	231	263	294	325	351
D312 - Nurse aides, orderlies and patient service associates											
Demand forecast	22,363	23,186	24,018	24,840	25,627	26,409	27,202	27,995	28,787	29,619	30,441
Labour supply forecast	22,632	23,263	23,917	24,573	25,186	25,796	26,420	27,052	27,688	28,356	29,031
Cumulative shortage*	-9	183	361	527	701	873	1,042	1,203	1,359	1,523	1,670
D313 - Other assisting occupations in support of health services											
Demand forecast	9,121	9,330	9,522	9,702	9,922	10,160	10,417	10,675	10,955	11,222	11,497
Labour supply forecast	9,249	9,380	9,501	9,617	9,771	9,944	10,138	10,336	10,558	10,765	10,986
Cumulative shortage*	-3	75	146	210	276	341	404	464	522	582	636
E012 - Lawyers and Quebec notaries											
Demand forecast	8,821	8,898	8,997	9,058	9,208	9,344	9,491	9,601	9,741	9,859	9,968
Labour supply forecast	8,591	8,725	8,860	8,998	9,137	9,279	9,424	9,570	9,719	9,870	10,024
Cumulative shortage*	290	233	197	120	131	125	127	91	82	49	4
E021 - Psychologists**											
Demand forecast	1,524	1,585	1,642	1,697	1,749	1,805	1,860	1,908	1,957	2,018	2,064
Labour supply forecast	1,535	1,581	1,625	1,676	1,716	1,768	1,817	1,865	1,914	1,975	2,027
Cumulative shortage*	0	15	28	32	44	48	54	54	54	54	48
E022 - Social workers											
Demand forecast	6,552	6,796	7,023	7,221	7,472	7,689	7,909	8,123	8,339	8,562	8,773
Labour supply forecast	6,598	6,780	6,949	7,132	7,332	7,531	7,725	7,940	8,153	8,378	8,616
Cumulative shortage*	0	62	120	135	186	204	230	229	232	230	203
E023 - Family, marriage and other related counsellors											
Demand forecast	5,305	5,508	5,708	5,879	6,081	6,263	6,449	6,624	6,811	6,994	7,168
Labour supply forecast	5,342	5,495	5,647	5,806	5,966	6,134	6,299	6,474	6,659	6,843	7,039
Cumulative shortage*	0	50	98	110	152	166	187	187	169	188	166
E024 - Ministers of religion**											
Demand forecast	2,217	2,278	2,354	2,407	2,474	2,523	2,600	2,648	2,706	2,738	2,771
Labour supply forecast	2,233	2,273	2,329	2,377	2,427	2,471	2,539	2,588	2,646	2,679	2,721
Cumulative shortage*	-1	20	40	45	62	67	76	75	75	74	65

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
E031 - Natural and applied science policy researchers, consultants and program officers**											
Demand forecast	3,094	3,128	3,151	3,169	3,225	3,282	3,326	3,366	3,413	3,449	3,487
Labour supply forecast	3,075	3,107	3,131	3,167	3,207	3,262	3,302	3,351	3,404	3,451	3,512
Cumulative shortage*	40	42	41	23	39	41	45	36	30	19	-4
E033 - Business development officers and marketing researchers and consultants**											
Demand forecast	2,053	2,079	2,094	2,106	2,147	2,181	2,214	2,238	2,275	2,303	2,318
Labour supply forecast	2,046	2,071	2,086	2,110	2,140	2,173	2,203	2,234	2,275	2,310	2,341
Cumulative shortage*	21	22	22	10	21	22	25	18	14	7	-9
E034 - Social policy researchers, consultants and program officers**											
Demand forecast	2,697	2,761	2,834	2,883	2,967	3,032	3,106	3,166	3,232	3,288	3,337
Labour supply forecast	2,688	2,751	2,824	2,890	2,959	3,022	3,092	3,161	3,233	3,299	3,370
Cumulative shortage*	28	29	29	12	27	29	33	24	18	8	-14
E035 - Education policy researchers, consultants and program officers**											
Demand forecast	2,380	2,455	2,529	2,579	2,651	2,717	2,780	2,832	2,889	2,955	2,996
Labour supply forecast	2,371	2,445	2,519	2,584	2,643	2,707	2,767	2,827	2,889	2,964	3,025
Cumulative shortage*	25	26	26	11	24	26	29	21	16	7	-13
E036 - Recreation, sports and fitness program supervisors and consultants**											
Demand forecast	1,875	1,921	1,987	2,029	2,089	2,134	2,197	2,240	2,288	2,335	2,371
Labour supply forecast	1,869	1,914	1,980	2,034	2,083	2,127	2,187	2,236	2,288	2,343	2,395
Cumulative shortage*	19	20	20	8	19	20	23	17	13	5	-11
E039 - Health policy researchers, consultants and program officers**											
Demand forecast	2,053	2,118	2,173	2,224	2,295	2,360	2,423	2,475	2,533	2,589	2,643
Labour supply forecast	2,046	2,109	2,165	2,229	2,288	2,352	2,411	2,470	2,533	2,597	2,669
Cumulative shortage*	21	23	22	9	21	22	26	19	14	6	-12
E111 - University professors											
Demand forecast	9,165	9,414	9,660	9,893	10,151	10,392	10,622	10,885	11,120	11,346	11,522
Labour supply forecast	9,307	9,523	9,741	9,956	10,187	10,418	10,655	10,896	11,143	11,394	11,652
Cumulative shortage*	58	91	119	137	164	174	167	189	177	152	70
E112 - Post-secondary teaching and research assistants**											
Demand forecast	7,723	7,923	8,127	8,332	8,540	8,743	8,935	9,158	9,354	9,547	9,697
Labour supply forecast	7,962	8,122	8,290	8,467	8,638	8,818	9,000	9,189	9,379	9,575	9,775
Cumulative shortage*	61	101	137	165	202	225	235	269	275	272	222
E121 - College and other vocational instructors											
Demand forecast	10,053	10,328	10,622	10,827	11,080	11,314	11,547	11,792	12,023	12,266	12,487
Labour supply forecast	10,219	10,442	10,671	10,905	11,143	11,387	11,636	11,891	12,151	12,417	12,689
Cumulative shortage*	34	86	151	122	137	127	111	101	72	49	-2
E131 - Secondary school teachers**											
Demand forecast	24,398	24,987	25,612	26,243	26,913	27,558	28,169	28,868	29,486	30,184	30,854
Labour supply forecast	24,866	25,422	25,986	26,567	27,159	27,771	28,394	29,028	29,674	30,342	31,016
Cumulative shortage*	52	85	146	196	274	307	295	360	332	362	358
E132 - Elementary school and kindergarten teachers											
Demand forecast	17,836	18,268	18,730	19,189	19,684	20,146	20,593	21,109	21,563	22,067	22,565
Labour supply forecast	18,178	18,586	19,003	19,426	19,863	20,301	20,757	21,226	21,700	22,182	22,683
Cumulative shortage*	38	62	107	143	201	225	216	263	243	265	262
E133 - Educational counsellors**											
Demand forecast	1,741	1,782	1,829	1,877	1,925	1,973	2,012	2,060	2,108	2,157	2,205
Labour supply forecast	1,736	1,774	1,816	1,860	1,901	1,946	1,985	2,027	2,076	2,122	2,169
Cumulative shortage*	5	8	13	17	24	27	27	33	32	35	36

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<i>E211 - Paralegal and related occupations</i>											
Demand forecast	8,000	8,043	8,125	8,172	8,289	8,401	8,512	8,616	8,728	8,835	8,932
Labour supply forecast	8,139	8,134	8,162	8,181	8,273	8,378	8,476	8,576	8,692	8,807	8,923
Cumulative shortage*	38	86	140	168	193	200	213	217	213	205	186
<i>E212 - Community and social service workers</i>											
Demand forecast	12,318	12,760	13,221	13,652	14,067	14,448	14,856	15,273	15,661	16,064	16,451
Labour supply forecast	12,532	12,905	13,282	13,667	14,040	14,409	14,794	15,202	15,597	16,014	16,436
Cumulative shortage*	66	135	219	265	307	319	342	351	344	330	295
<i>E213 - Employment counsellors**</i>											
Demand forecast	1,672	1,708	1,748	1,787	1,823	1,866	1,908	1,949	1,985	2,024	2,059
Labour supply forecast	1,701	1,727	1,756	1,789	1,819	1,861	1,900	1,940	1,977	2,017	2,057
Cumulative shortage*	8	18	29	35	41	42	45	46	45	44	39
<i>E215 - Other instructors**</i>											
Demand forecast	2,169	2,234	2,314	2,363	2,431	2,494	2,548	2,609	2,663	2,722	2,775
Labour supply forecast	2,207	2,259	2,325	2,366	2,426	2,487	2,537	2,597	2,652	2,714	2,773
Cumulative shortage*	11	24	38	46	54	56	60	61	60	57	51
<i>E217 - Early childhood educators and assistants</i>											
Demand forecast	19,911	20,665	21,447	22,183	22,885	23,550	24,240	24,931	25,609	26,328	27,017
Labour supply forecast	20,257	20,899	21,546	22,208	22,842	23,487	24,139	24,816	25,504	26,246	26,992
Cumulative shortage*	109	221	356	430	498	518	556	570	560	537	480
<i>F021 - Writers**</i>											
Demand forecast	2,397	2,446	2,494	2,531	2,585	2,633	2,692	2,731	2,787	2,824	2,866
Labour supply forecast	2,347	2,383	2,420	2,459	2,492	2,528	2,572	2,604	2,649	2,679	2,721
Cumulative shortage*	50	63	74	72	93	105	120	127	138	145	145
<i>F024 - Professional occupations in public relations and communications**</i>											
Demand forecast	4,953	5,051	5,136	5,201	5,329	5,435	5,533	5,631	5,733	5,838	5,932
Labour supply forecast	4,850	4,921	4,983	5,053	5,137	5,217	5,285	5,369	5,449	5,539	5,632
Cumulative shortage*	103	130	153	148	192	218	248	262	284	299	300
<i>F031 - Producers, directors, choreographers and related occupations**</i>											
Demand forecast	3,565	3,671	3,790	3,881	3,970	4,056	4,149	4,238	4,338	4,417	4,505
Labour supply forecast	3,498	3,568	3,648	3,732	3,807	3,886	3,976	4,055	4,153	4,226	4,312
Cumulative shortage*	67	103	142	149	163	170	173	183	185	191	193
<i>F033 - Musicians and singers**</i>											
Demand forecast	2,787	2,889	2,981	3,054	3,138	3,211	3,286	3,373	3,443	3,544	3,628
Labour supply forecast	2,836	2,912	2,975	3,045	3,121	3,191	3,266	3,347	3,418	3,516	3,601
Cumulative shortage*	51	77	106	109	117	120	120	126	125	128	127
<i>F034 - Dancers**</i>											
Demand forecast	1,202	1,246	1,290	1,316	1,360	1,395	1,421	1,463	1,492	1,534	1,569
Labour supply forecast	1,231	1,264	1,296	1,321	1,361	1,395	1,421	1,461	1,491	1,532	1,568
Cumulative shortage*	22	33	45	46	50	51	51	53	52	53	52
<i>F036 - Painters, sculptors and other visual artists**</i>											
Demand forecast	1,535	1,584	1,632	1,671	1,710	1,749	1,788	1,823	1,865	1,903	1,943
Labour supply forecast	1,526	1,560	1,591	1,628	1,661	1,698	1,736	1,767	1,809	1,844	1,884
Cumulative shortage*	28	43	60	62	68	70	71	75	75	78	78
<i>F111 - Library and archive technicians and assistants**</i>											
Demand forecast	1,556	1,610	1,658	1,697	1,746	1,786	1,830	1,873	1,917	1,965	2,007
Labour supply forecast	1,619	1,655	1,685	1,719	1,754	1,786	1,822	1,856	1,894	1,935	1,973
Cumulative shortage*	33	51	69	74	88	96	104	113	119	126	130

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
F121 - Photographers**											
Demand forecast	1,989	2,012	2,027	2,048	2,078	2,116	2,140	2,159	2,198	2,245	2,277
Labour supply forecast	1,931	1,956	1,974	2,004	2,033	2,075	2,100	2,123	2,159	2,210	2,243
Cumulative shortage*	63	61	58	49	50	46	45	41	44	40	39
F141 - Graphic designers and illustrators**											
Demand forecast	4,059	4,093	4,149	4,191	4,252	4,307	4,360	4,414	4,476	4,532	4,586
Labour supply forecast	3,969	3,997	4,045	4,087	4,121	4,160	4,190	4,229	4,262	4,298	4,329
Cumulative shortage*	90	96	104	104	131	147	170	185	214	234	257
F142 - Interior designers**											
Demand forecast	3,188	3,223	3,248	3,278	3,326	3,358	3,410	3,443	3,495	3,539	3,590
Labour supply forecast	3,117	3,147	3,167	3,197	3,224	3,243	3,277	3,299	3,328	3,357	3,389
Cumulative shortage*	71	76	81	81	102	115	133	144	167	182	201
F152 - Coaches**											
Demand forecast	1,500	1,542	1,599	1,632	1,681	1,729	1,768	1,808	1,847	1,898	1,941
Labour supply forecast	1,525	1,549	1,589	1,617	1,648	1,685	1,712	1,745	1,776	1,821	1,862
Cumulative shortage*	-4	14	31	36	54	65	77	84	92	98	100
F153 - Sports officials and referees**											
Demand forecast	996	1,025	1,055	1,077	1,111	1,134	1,169	1,196	1,222	1,239	1,260
Labour supply forecast	1,024	1,042	1,060	1,079	1,102	1,118	1,145	1,167	1,188	1,202	1,223
Cumulative shortage*	17	28	40	43	54	61	69	74	79	82	82
F154 - Program leaders and instructors in recreation, sport and fitness											
Demand forecast	7,695	7,936	8,175	8,366	8,613	8,830	9,064	9,276	9,488	9,695	9,883
Labour supply forecast	8,140	8,299	8,453	8,624	8,789	8,958	9,136	9,315	9,494	9,680	9,869
Cumulative shortage*	155	237	322	342	424	472	528	561	594	615	614
G011 - Retail trade supervisors											
Demand forecast	22,124	22,313	22,570	22,853	22,959	23,213	23,541	23,959	24,456	24,761	25,245
Labour supply forecast	22,238	22,449	22,571	22,745	22,812	23,071	23,330	23,719	24,138	24,575	25,124
Cumulative shortage*	188	166	301	410	449	444	513	542	620	488	423
G012 - Food service supervisors											
Demand forecast	7,799	8,064	8,443	8,742	9,206	9,513	9,863	10,085	10,307	10,451	10,517
Labour supply forecast	7,840	8,114	8,444	8,701	9,148	9,455	9,775	9,984	10,174	10,373	10,467
Cumulative shortage*	65	56	105	147	164	164	194	207	239	184	156
G013 - Executive housekeepers**											
Demand forecast	1,268	1,313	1,372	1,439	1,503	1,544	1,585	1,628	1,670	1,686	1,705
Labour supply forecast	1,258	1,304	1,354	1,414	1,474	1,515	1,551	1,591	1,627	1,652	1,675
Cumulative shortage*	11	10	19	26	30	30	35	38	44	35	31
G015 - Cleaning supervisors**											
Demand forecast	3,687	3,753	3,866	3,989	4,057	4,117	4,187	4,245	4,319	4,357	4,416
Labour supply forecast	3,706	3,776	3,867	3,971	4,031	4,092	4,150	4,203	4,263	4,325	4,395
Cumulative shortage*	30	26	48	67	75	74	86	91	105	81	70
G016 - Other service supervisors**											
Demand forecast	3,142	3,215	3,332	3,455	3,543	3,603	3,684	3,752	3,826	3,865	3,915
Labour supply forecast	3,159	3,235	3,333	3,439	3,521	3,581	3,651	3,715	3,777	3,836	3,897
Cumulative shortage*	25	22	41	58	64	64	75	79	91	71	60
G111 - Sales representatives - wholesale trade (non-technical)											
Demand forecast	26,142	26,435	26,485	26,806	27,084	27,484	27,836	28,206	28,581	28,957	29,337
Labour supply forecast	26,658	26,917	27,180	27,445	27,712	27,983	28,255	28,531	28,809	29,090	29,373
Cumulative shortage*	84	118	-95	-39	-28	101	181	275	372	467	564

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G121 - Technical sales specialists - wholesale trade											
Demand forecast	16,378	16,418	16,499	16,684	16,958	17,143	17,299	17,480	17,691	17,878	18,042
Labour supply forecast	17,461	17,522	17,584	17,645	17,707	17,769	17,831	17,893	17,956	18,019	18,082
Cumulative shortage*	-383	-404	-385	-261	-49	74	168	287	435	559	660
G131 - Insurance agents and brokers**											
Demand forecast	5,287	5,352	5,407	5,456	5,521	5,574	5,638	5,694	5,751	5,792	5,841
Labour supply forecast	5,240	5,293	5,355	5,414	5,475	5,529	5,578	5,631	5,678	5,722	5,769
Cumulative shortage*	78	90	83	73	77	76	91	94	104	101	103
G132 - Real estate agents and salespersons											
Demand forecast	6,991	7,107	7,196	7,281	7,371	7,432	7,537	7,601	7,674	7,732	7,798
Labour supply forecast	6,928	7,027	7,126	7,225	7,308	7,371	7,456	7,516	7,576	7,638	7,702
Cumulative shortage*	104	121	111	97	104	102	122	126	139	135	137
G133 - Retail and wholesale buyers**											
Demand forecast	3,642	3,656	3,657	3,650	3,671	3,706	3,749	3,806	3,876	3,930	3,992
Labour supply forecast	3,490	3,495	3,501	3,502	3,519	3,554	3,585	3,638	3,700	3,753	3,812
Cumulative shortage*	175	184	179	171	175	175	187	191	199	200	203
G211 - Retail salespersons and sales clerks											
Demand forecast	68,519	69,288	69,868	71,071	71,524	72,600	73,583	74,654	75,886	76,889	77,969
Labour supply forecast	70,498	71,000	71,506	72,015	72,527	73,044	73,563	74,087	74,614	75,145	75,679
Cumulative shortage*	1,221	1,488	1,562	2,256	2,197	2,756	3,220	3,767	4,472	4,944	5,490
G311 - Cashiers											
Demand forecast	39,000	39,400	40,200	41,100	42,100	42,800	43,600	44,500	45,400	46,000	46,700
Labour supply forecast	41,564	42,034	42,509	42,989	43,474	43,965	44,462	44,964	45,472	45,986	46,505
Cumulative shortage*	-1,064	-1,134	-809	-389	126	335	638	1,036	1,428	1,514	1,695
G411 - Chefs											
Demand forecast	8,399	8,617	8,929	9,167	9,349	9,547	9,837	10,056	10,275	10,383	10,512
Labour supply forecast	8,096	8,287	8,495	8,688	8,911	9,128	9,411	9,632	9,857	10,087	10,290
Cumulative shortage*	303	330	434	479	438	419	426	424	418	296	222
G412 - Cooks											
Demand forecast	22,401	22,983	23,771	24,433	24,851	25,353	25,863	26,444	27,025	27,317	27,788
Labour supply forecast	23,323	23,762	24,198	24,661	25,107	25,573	25,987	26,477	26,976	27,486	28,038
Cumulative shortage*	878	1,021	1,373	1,572	1,544	1,580	1,676	1,767	1,849	1,631	1,550
G511 - Maitres d'hôtel and hosts/hostesses											
Demand forecast	7,385	7,588	7,845	8,064	8,216	8,364	8,570	8,748	8,946	9,034	9,158
Labour supply forecast	7,137	7,288	7,433	7,586	7,743	7,897	8,054	8,213	8,379	8,547	8,712
Cumulative shortage*	328	380	492	558	553	547	596	615	647	567	526
G512 - Bartenders											
Demand forecast	4,606	4,726	4,893	5,025	5,121	5,215	5,335	5,450	5,571	5,633	5,708
Labour supply forecast	4,796	4,890	4,994	5,093	5,199	5,305	5,401	5,512	5,621	5,741	5,850
Cumulative shortage*	197	223	286	319	309	297	321	325	337	279	245
G513 - Food and beverage servers											
Demand forecast	24,532	25,186	26,046	26,766	27,255	27,761	28,476	29,085	29,754	30,048	30,509
Labour supply forecast	24,595	25,092	25,600	26,121	26,646	27,191	27,759	28,326	28,907	29,490	30,106
Cumulative shortage*	1,070	1,227	1,579	1,778	1,742	1,703	1,850	1,892	1,980	1,691	1,536
G611 - Police officers** (except commissioned)											
Demand forecast	6,089	6,277	6,484	6,583	6,791	7,031	7,190	7,341	7,504	7,634	7,738
Labour supply forecast	6,216	6,369	6,527	6,688	6,852	7,021	7,192	7,369	7,549	7,733	7,923
Cumulative shortage*	-129	-94	-45	-107	-63	8	-4	-30	-47	-101	-187

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G612 - Firefighters**											
Demand forecast	4,343	4,462	4,591	4,655	4,803	4,960	5,071	5,169	5,267	5,359	5,416
Labour supply forecast	4,303	4,370	4,437	4,505	4,575	4,645	4,718	4,790	4,865	4,940	5,015
Cumulative shortage*	41	93	155	151	229	316	354	380	403	420	402
G622 - Correctional service officers**											
Demand forecast	4,878	5,010	5,171	5,250	5,463	5,634	5,761	5,883	6,009	6,103	6,182
Labour supply forecast	5,090	5,174	5,277	5,374	5,475	5,562	5,664	5,773	5,881	5,976	6,085
Cumulative shortage*	-16	32	90	72	184	268	293	306	324	323	293
G631 - Security guards and related occupations											
Demand forecast	8,947	9,034	9,132	9,202	9,328	9,451	9,585	9,701	9,858	9,979	10,111
Labour supply forecast	8,968	9,089	9,211	9,335	9,460	9,587	9,716	9,847	9,979	10,114	10,250
Cumulative shortage*	328	294	270	216	217	213	218	203	228	214	210
G711 - Travel counsellors**											
Demand forecast	2,360	2,378	2,368	2,375	2,341	2,351	2,386	2,421	2,467	2,496	2,542
Labour supply forecast	2,434	2,448	2,463	2,488	2,494	2,510	2,517	2,534	2,560	2,587	2,623
Cumulative shortage*	126	130	105	87	47	41	69	87	107	109	119
G713 - Airline sales and service agents**											
Demand forecast	1,479	1,467	1,465	1,447	1,444	1,438	1,451	1,480	1,504	1,523	1,563
Labour supply forecast	1,512	1,510	1,510	1,516	1,510	1,511	1,506	1,507	1,513	1,520	1,532
Cumulative shortage*	-33	-43	-45	-69	-66	-73	-55	-27	-9	3	31
G715 - Hotel front desk clerks**											
Demand forecast	2,664	2,742	2,810	2,834	2,927	3,011	3,135	3,225	3,303	3,361	3,402
Labour supply forecast	2,629	2,702	2,773	2,823	2,910	2,982	3,073	3,139	3,190	3,244	3,279
Cumulative shortage*	35	40	37	11	17	29	62	86	113	117	123
G723 - Casino occupations**											
Demand forecast	1,690	1,730	1,781	1,823	1,865	1,897	1,932	1,983	2,026	2,064	2,105
Labour supply forecast	1,645	1,677	1,722	1,766	1,806	1,837	1,868	1,919	1,957	1,996	2,038
Cumulative shortage*	45	53	59	57	59	60	64	64	69	68	67
G731 - Operators and attendants in amusement, recreation and sport**											
Demand forecast	3,633	3,721	3,810	3,868	3,957	4,035	4,127	4,215	4,303	4,379	4,457
Labour supply forecast	3,955	4,014	4,073	4,123	4,182	4,234	4,287	4,348	4,402	4,464	4,527
Cumulative shortage*	80	109	139	147	177	203	242	269	303	317	332
G811 - Visiting homemakers, housekeepers and related occupations											
Demand forecast	8,182	8,481	8,768	9,036	9,284	9,526	9,761	10,019	10,289	10,580	10,871
Labour supply forecast	8,216	8,446	8,659	8,917	9,165	9,422	9,678	9,946	10,238	10,543	10,858
Cumulative shortage*	66	135	209	219	219	204	183	173	151	137	113
G812 - Elementary and secondary school teacher assistants											
Demand forecast	11,075	11,477	11,893	12,177	12,512	12,827	13,112	13,442	13,731	14,103	14,441
Labour supply forecast	11,804	12,132	12,468	12,756	13,111	13,467	13,800	14,164	14,504	14,918	15,311
Cumulative shortage*	71	145	225	221	201	160	112	78	27	-15	-70
G814 - Babysitters, nannies and parents' helpers											
Demand forecast	9,623	9,934	10,281	10,576	10,828	11,072	11,357	11,636	11,925	12,162	12,425
Labour supply forecast	9,751	9,983	10,246	10,533	10,786	11,051	11,363	11,656	11,975	12,230	12,524
Cumulative shortage*	72	151	235	243	242	221	194	180	150	132	101
G911 - Hairstylists and barbers											
Demand forecast	12,133	12,504	12,845	13,133	13,471	13,782	14,109	14,432	14,776	15,117	15,458
Labour supply forecast	11,900	12,216	12,538	12,864	13,210	13,556	13,917	14,275	14,654	15,040	15,442
Cumulative shortage*	233	288	307	269	261	226	192	157	122	77	16

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G922 - Estheticians, electrologists and related occupations**											
Demand forecast	3,842	3,947	4,060	4,166	4,272	4,372	4,476	4,576	4,687	4,784	4,881
Labour supply forecast	4,109	4,200	4,302	4,407	4,499	4,596	4,698	4,795	4,901	4,998	5,097
Cumulative shortage*	33	47	58	59	73	76	78	81	86	86	84
G923 - Pet groomers and animal care workers**											
Demand forecast	4,546	4,663	4,774	4,882	5,003	5,119	5,231	5,344	5,464	5,580	5,702
Labour supply forecast	4,702	4,799	4,892	4,994	5,095	5,204	5,309	5,415	5,525	5,637	5,758
Cumulative shortage*	44	64	82	88	108	115	122	129	139	143	144
G931 - Light duty cleaners											
Demand forecast	24,061	24,595	25,149	25,599	26,178	26,672	27,248	27,738	28,308	28,795	29,235
Labour supply forecast	24,389	24,873	25,384	25,877	26,467	27,019	27,579	28,102	28,631	29,166	29,663
Cumulative shortage*	572	622	665	622	611	553	569	536	577	529	472
G932 - Specialized cleaners											
Demand forecast	8,730	8,848	8,970	9,074	9,158	9,258	9,403	9,533	9,710	9,825	9,972
Labour supply forecast	9,005	9,087	9,177	9,278	9,348	9,451	9,573	9,696	9,841	9,954	10,101
Cumulative shortage*	225	261	293	296	310	307	330	337	369	371	371
G933 - Janitors, caretakers and building superintendents											
Demand forecast	28,109	28,657	29,181	29,627	30,064	30,470	30,949	31,429	31,982	32,480	32,993
Labour supply forecast	28,986	29,312	29,617	29,940	30,211	30,501	30,776	31,102	31,413	31,765	32,135
Cumulative shortage*	823	1,045	1,264	1,387	1,553	1,669	1,873	2,027	2,269	2,415	2,558
G941 - Butchers, meat cutters and fishmongers - retail and wholesale**											
Demand forecast	5,564	5,590	5,545	5,658	5,766	5,853	5,957	6,065	6,195	6,276	6,383
Labour supply forecast	5,902	5,950	5,990	6,035	6,074	6,121	6,184	6,249	6,321	6,394	6,475
Cumulative shortage*	-75	-97	-182	-114	-45	-5	36	79	137	145	171
G942 - Bakers**											
Demand forecast	3,311	3,344	3,349	3,442	3,542	3,619	3,684	3,748	3,815	3,852	3,893
Labour supply forecast	3,494	3,541	3,599	3,652	3,712	3,765	3,804	3,841	3,872	3,904	3,928
Cumulative shortage*	-46	-60	-113	-73	-33	-9	17	44	80	85	102
G951 - Food counter attendants, kitchen helpers and related occupations											
Demand forecast	33,828	34,763	35,947	36,953	37,686	38,419	39,391	40,254	41,195	41,701	42,380
Labour supply forecast	34,781	35,580	36,398	37,234	38,090	38,965	39,860	40,776	41,713	42,671	43,651
Cumulative shortage*	1,147	1,283	1,649	1,819	1,696	1,554	1,631	1,578	1,582	1,130	829
G971 - Service station attendants**											
Demand forecast	1,209	1,208	1,209	1,228	1,262	1,230	1,248	1,267	1,283	1,300	1,323
Labour supply forecast	1,195	1,209	1,211	1,217	1,233	1,237	1,249	1,259	1,262	1,271	1,285
Cumulative shortage*	12	-3	-4	9	27	-9	-3	6	19	27	36
G972 - Grocery clerks and store shelf stockers											
Demand forecast	19,658	19,539	19,647	19,973	20,390	19,942	20,182	20,490	20,859	21,141	21,462
Labour supply forecast	20,517	20,643	20,768	20,892	21,020	21,176	21,323	21,489	21,661	21,825	22,003
Cumulative shortage*	185	-60	-77	125	414	-190	-97	45	242	360	503
G973 - Other elemental sales occupations**											
Demand forecast	4,967	4,962	5,028	5,148	5,279	5,166	5,236	5,303	5,387	5,454	5,511
Labour supply forecast	5,184	5,242	5,314	5,384	5,442	5,485	5,532	5,561	5,594	5,630	5,650
Cumulative shortage*	41	-22	-28	22	95	-61	-38	0	51	82	119
G981 - Dry cleaning and laundry occupations**											
Demand forecast	1,449	1,499	1,553	1,593	1,641	1,688	1,730	1,769	1,814	1,848	1,890
Labour supply forecast	1,500	1,538	1,579	1,611	1,652	1,694	1,727	1,758	1,794	1,824	1,862
Cumulative shortage*	31	43	56	64	71	76	85	93	102	106	110

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
G983 - Other elemental service occupations											
Demand forecast	5,310	5,440	5,568	5,693	5,808	5,917	6,051	6,182	6,319	6,438	6,559
Labour supply forecast	5,796	5,881	5,959	6,053	6,140	6,230	6,331	6,435	6,537	6,644	6,747
Cumulative shortage*	114	159	209	240	268	287	320	347	382	394	412
H012 - Contractors and supervisors, electrical trades and telecommunications occupations**											
Demand forecast	3,787	3,898	3,987	4,086	4,091	4,179	4,195	4,286	4,280	4,285	4,386
Labour supply forecast	3,902	3,941	4,011	4,094	4,075	4,187	4,164	4,268	4,289	4,290	4,394
Cumulative shortage*	-62	10	29	45	69	45	84	71	44	48	45
H013 - Contractors and supervisors, pipefitting trades**											
Demand forecast	2,083	2,139	2,163	2,192	2,235	2,239	2,287	2,303	2,309	2,332	2,352
Labour supply forecast	2,117	2,133	2,146	2,166	2,196	2,213	2,239	2,262	2,282	2,303	2,324
Cumulative shortage*	-34	6	17	26	39	26	48	41	27	29	28
H014 - Contractors and supervisors, metal forming shaping and erecting trades**											
Demand forecast	4,166	4,258	4,296	4,345	4,410	4,428	4,494	4,535	4,558	4,614	4,645
Labour supply forecast	4,293	4,305	4,322	4,353	4,393	4,437	4,460	4,516	4,568	4,619	4,654
Cumulative shortage*	-70	10	31	49	74	48	91	76	47	52	48
H015 - Contractors and supervisors, carpentry trades**											
Demand forecast	3,269	3,408	3,469	3,538	3,602	3,602	3,695	3,718	3,712	3,767	3,808
Labour supply forecast	3,349	3,425	3,469	3,524	3,567	3,588	3,646	3,681	3,698	3,749	3,793
Cumulative shortage*	-80	-17	0	14	35	14	49	37	14	18	15
H016 - Contractors and supervisors, mechanic trades											
Demand forecast	10,305	10,494	10,584	10,712	10,875	10,954	11,174	11,291	11,414	11,556	11,699
Labour supply forecast	10,618	10,609	10,647	10,733	10,833	10,975	11,090	11,243	11,438	11,569	11,721
Cumulative shortage*	-170	28	80	122	185	122	227	191	119	130	121
H017 - Contractors and supervisors, heavy construction equipment crews											
Demand forecast	9,917	10,274	10,436	10,633	10,847	10,867	11,157	11,215	11,238	11,391	11,514
Labour supply forecast	10,219	10,387	10,499	10,654	10,805	10,889	11,074	11,168	11,262	11,404	11,536
Cumulative shortage*	-161	28	78	120	183	119	224	188	117	128	119
H019 - Contractors and supervisors other construction trades, installers, repairers and servicers											
Demand forecast	14,352	14,892	15,249	15,446	15,766	15,822	16,179	16,247	16,323	16,541	16,645
Labour supply forecast	14,789	15,056	15,340	15,476	15,705	15,854	16,059	16,179	16,358	16,560	16,676
Cumulative shortage*	-235	38	111	172	263	170	322	270	167	183	171
H022 - Supervisors, motor transport and other ground transit operators											
Demand forecast	6,628	6,656	6,634	6,607	6,619	6,701	6,801	6,914	7,049	7,166	7,306
Labour supply forecast	6,650	6,712	6,770	6,842	6,897	6,966	7,034	7,103	7,164	7,235	7,296
Cumulative shortage*	-22	-56	-136	-235	-278	-265	-233	-189	-115	-69	10
H111 - Plumbers											
Demand forecast	7,965	8,281	8,454	8,620	8,790	8,813	9,001	9,061	9,079	9,190	9,276
Labour supply forecast	8,474	8,602	8,693	8,784	8,876	8,932	9,026	9,094	9,153	9,234	9,317
Cumulative shortage*	-99	89	171	246	324	291	385	377	336	366	369
H112 - Steamfitters, pipefitters and sprinkler system installers											
Demand forecast	7,573	7,749	7,853	7,959	8,069	8,112	8,242	8,302	8,329	8,412	8,469
Labour supply forecast	8,058	8,064	8,108	8,153	8,194	8,268	8,311	8,378	8,443	8,498	8,551
Cumulative shortage*	-95	75	135	196	265	234	321	314	276	304	308
H121 - Carpenters											
Demand forecast	15,498	16,175	16,553	16,908	17,248	17,286	17,736	17,845	17,862	18,084	18,287
Labour supply forecast	17,005	17,119	17,232	17,346	17,460	17,574	17,691	17,806	17,921	18,039	18,157
Cumulative shortage*	-317	246	511	752	978	902	1,235	1,229	1,131	1,235	1,320

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H122 - Cabinetmakers**											
Demand forecast	1,814	1,853	1,870	1,887	1,911	1,916	1,934	1,944	1,951	1,968	1,974
Labour supply forecast	1,816	1,825	1,835	1,845	1,856	1,868	1,877	1,889	1,902	1,913	1,924
Cumulative shortage*	8	38	45	52	65	58	67	65	59	65	60
H131 - Bricklayers**											
Demand forecast	2,077	2,159	2,210	2,262	2,302	2,303	2,364	2,376	2,375	2,406	2,429
Labour supply forecast	2,264	2,274	2,295	2,319	2,334	2,351	2,373	2,391	2,409	2,431	2,449
Cumulative shortage*	-46	26	56	84	109	93	132	126	107	116	121
H132 - Concrete finishers**											
Demand forecast	2,167	2,259	2,310	2,353	2,402	2,403	2,464	2,476	2,475	2,506	2,529
Labour supply forecast	2,361	2,379	2,398	2,412	2,435	2,453	2,473	2,491	2,510	2,531	2,549
Cumulative shortage*	-47	27	59	88	114	97	138	132	112	122	127
H134 - Plasterers, drywall installers and finishers and lathers											
Demand forecast	6,021	6,288	6,431	6,567	6,695	6,709	6,880	6,917	6,924	7,007	7,085
Labour supply forecast	6,562	6,624	6,678	6,733	6,788	6,849	6,906	6,961	7,023	7,080	7,143
Cumulative shortage*	-132	73	162	243	316	269	383	365	310	336	351
H141 - Roofers and shinglers**											
Demand forecast	2,264	2,368	2,421	2,483	2,526	2,535	2,598	2,617	2,615	2,647	2,676
Labour supply forecast	2,611	2,644	2,666	2,699	2,715	2,739	2,752	2,786	2,802	2,824	2,847
Cumulative shortage*	-47	24	55	84	111	96	136	131	113	123	129
H143 - Insulators**											
Demand forecast	3,452	3,579	3,648	3,717	3,785	3,794	3,882	3,904	3,907	3,953	3,989
Labour supply forecast	3,623	3,636	3,655	3,676	3,701	3,730	3,754	3,782	3,809	3,837	3,861
Cumulative shortage*	-71	43	93	141	184	164	228	222	198	216	228
H144 - Painters and decorators											
Demand forecast	5,724	5,985	6,122	6,258	6,386	6,391	6,559	6,599	6,603	6,686	6,756
Labour supply forecast	6,243	6,319	6,374	6,432	6,490	6,530	6,593	6,643	6,691	6,745	6,797
Cumulative shortage*	-119	66	148	226	296	261	366	356	312	341	359
H145 - Floor covering installers**											
Demand forecast	4,049	4,206	4,301	4,376	4,461	4,468	4,573	4,603	4,609	4,671	4,721
Labour supply forecast	4,434	4,458	4,496	4,516	4,552	4,583	4,615	4,652	4,689	4,731	4,768
Cumulative shortage*	-85	48	105	160	209	185	258	251	220	240	253
H211 - Electricians (except industrial and power system)											
Demand forecast	18,852	19,532	19,876	20,223	20,629	20,676	21,063	21,167	21,193	21,444	21,612
Labour supply forecast	20,062	20,257	20,426	20,613	20,809	20,968	21,163	21,279	21,365	21,539	21,706
Cumulative shortage*	-110	375	550	710	920	808	1,000	988	928	1,005	1,006
H212 - Industrial electricians**											
Demand forecast	6,039	6,090	6,101	6,139	6,214	6,263	6,306	6,355	6,397	6,461	6,483
Labour supply forecast	6,103	6,106	6,109	6,111	6,114	6,116	6,120	6,162	6,222	6,262	6,285
Cumulative shortage*	36	84	92	128	200	247	286	293	275	299	298
H214 - Electrical power line and cable workers**											
Demand forecast	2,631	2,644	2,612	2,573	2,525	2,525	2,521	2,526	2,537	2,535	2,538
Labour supply forecast	2,607	2,610	2,613	2,615	2,616	2,622	2,627	2,628	2,631	2,632	2,634
Cumulative shortage*	24	34	-1	-42	-91	-97	-106	-102	-94	-97	-96
H216 - Telecommunications installation and repair workers**											
Demand forecast	2,954	3,005	3,070	3,119	3,172	3,221	3,272	3,326	3,386	3,423	3,463
Labour supply forecast	3,035	3,053	3,096	3,120	3,139	3,195	3,217	3,269	3,337	3,360	3,398
Cumulative shortage*	19	52	74	99	133	126	155	157	149	163	165

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H221 - Stationary engineers and auxiliary equipment operators											
Demand forecast	2,661	2,683	2,686	2,694	2,720	2,733	2,738	2,765	2,783	2,802	2,804
Labour supply forecast	2,602	2,605	2,608	2,610	2,614	2,616	2,620	2,640	2,643	2,647	2,648
Cumulative shortage*	59	78	78	84	106	117	118	125	140	155	156
H311 - Machinists and machining and tooling inspectors											
Demand forecast	7,681	7,731	7,748	7,763	7,853	7,930	8,021	8,096	8,166	8,244	8,319
Labour supply forecast	7,843	7,871	7,906	7,943	7,980	8,009	8,045	8,083	8,114	8,152	8,189
Cumulative shortage*	-162	-140	-158	-180	-127	-79	-24	13	52	92	130
H321 - Sheet metal workers**											
Demand forecast	3,120	3,233	3,282	3,338	3,398	3,411	3,484	3,501	3,507	3,558	3,601
Labour supply forecast	3,270	3,342	3,381	3,430	3,471	3,490	3,537	3,557	3,573	3,617	3,657
Cumulative shortage*	-50	-9	1	8	27	21	47	44	34	41	44
H324 - Ironworkers**											
Demand forecast	4,398	4,555	4,634	4,708	4,803	4,826	4,945	4,981	4,984	5,060	5,128
Labour supply forecast	4,867	4,971	5,040	5,108	5,180	5,215	5,301	5,343	5,361	5,431	5,500
Cumulative shortage*	-69	-16	-6	0	23	11	44	38	23	29	28
H326 - Welders and related machine operators											
Demand forecast	26,863	27,459	27,851	28,211	28,671	28,976	29,504	29,834	30,150	30,519	30,877
Labour supply forecast	27,708	27,931	28,233	28,529	28,821	29,182	29,477	29,829	30,227	30,534	30,865
Cumulative shortage*	-445	-72	18	82	250	194	427	405	323	385	412
H411 - Construction millwrights and industrial mechanics (except textile)											
Demand forecast	11,860	11,984	12,008	12,076	12,186	12,286	12,424	12,528	12,633	12,751	12,856
Labour supply forecast	12,197	12,265	12,313	12,409	12,475	12,552	12,604	12,669	12,731	12,794	12,849
Cumulative shortage*	-119	-63	-87	-115	-71	-48	38	77	120	175	225
H412 - Heavy-duty equipment mechanics											
Demand forecast	14,998	15,188	15,309	15,472	15,649	15,838	16,114	16,338	16,583	16,806	17,057
Labour supply forecast	15,424	15,545	15,698	15,898	16,021	16,181	16,348	16,522	16,712	16,862	17,048
Cumulative shortage*	-151	-82	-114	-151	-97	-68	41	91	146	219	284
H413 - Refrigeration and air conditioning mechanics**											
Demand forecast	2,781	2,877	2,916	2,972	3,019	3,030	3,099	3,120	3,141	3,185	3,221
Labour supply forecast	2,860	2,944	2,990	3,054	3,090	3,095	3,144	3,155	3,165	3,195	3,219
Cumulative shortage*	-28	-16	-23	-31	-20	-14	6	16	27	41	53
H415 - Aircraft mechanics and inspectors**											
Demand forecast	1,484	1,483	1,487	1,406	1,445	1,465	1,485	1,505	1,526	1,558	1,581
Labour supply forecast	1,527	1,519	1,526	1,446	1,480	1,498	1,508	1,523	1,539	1,564	1,581
Cumulative shortage*	-15	-8	-11	-12	-7	-5	5	10	15	22	28
H421 - Automotive service technicians, truck and bus mechanics and mechanical repairers											
Demand forecast	17,739	17,975	18,169	18,351	18,688	19,013	19,360	19,701	20,092	20,455	20,815
Labour supply forecast	18,179	18,413	18,636	18,874	19,131	19,400	19,667	19,943	20,235	20,534	20,833
Cumulative shortage*	-120	-118	-147	-203	-123	-67	13	78	177	241	302
H422 - Motor vehicle body repairers**											
Demand forecast	4,636	4,733	4,839	4,927	5,037	5,136	5,247	5,351	5,453	5,544	5,640
Labour supply forecast	4,751	4,849	4,964	5,068	5,157	5,241	5,330	5,417	5,492	5,566	5,645
Cumulative shortage*	-33	-34	-43	-59	-38	-23	-1	16	43	60	77
H512 - Tailors, dressmakers, furriers and milliners**											
Demand forecast	1,603	1,632	1,664	1,690	1,722	1,755	1,788	1,812	1,852	1,886	1,921
Labour supply forecast	1,812	1,833	1,859	1,880	1,896	1,919	1,941	1,955	1,982	2,006	2,030
Cumulative shortage*	-9	-1	5	10	26	36	47	57	70	80	91

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H523 - Other trades and related occupations**											
Demand forecast	1,204	1,211	1,221	1,220	1,235	1,251	1,268	1,285	1,307	1,324	1,348
Labour supply forecast	1,196	1,203	1,213	1,214	1,221	1,232	1,243	1,256	1,269	1,281	1,298
Cumulative shortage*	10	10	10	8	16	21	27	31	40	45	52
H531 - Residential and commercial installers and servicers											
Demand forecast	7,846	8,093	8,216	8,348	8,508	8,524	8,660	8,702	8,710	8,799	8,842
Labour supply forecast	8,118	8,272	8,381	8,491	8,596	8,636	8,737	8,785	8,817	8,892	8,951
Cumulative shortage*	-58	35	49	71	126	102	137	131	107	121	105
H532 - Waterworks and gas maintenance workers**											
Demand forecast	1,084	1,092	1,099	1,100	1,113	1,122	1,127	1,136	1,133	1,142	1,147
Labour supply forecast	1,093	1,088	1,093	1,090	1,096	1,108	1,108	1,118	1,118	1,125	1,132
Cumulative shortage*	-8	5	7	11	18	15	20	19	16	18	16
H533 - Automotive mechanical installers and servicers**											
Demand forecast	3,166	3,198	3,217	3,248	3,286	3,330	3,373	3,426	3,486	3,531	3,572
Labour supply forecast	3,276	3,269	3,282	3,304	3,320	3,374	3,403	3,459	3,529	3,568	3,616
Cumulative shortage*	-26	13	19	28	50	40	54	51	41	47	40
H535 - Other repairers and servicers**											
Demand forecast	2,041	2,056	2,069	2,080	2,105	2,132	2,151	2,177	2,211	2,238	2,266
Labour supply forecast	2,056	2,046	2,055	2,060	2,071	2,103	2,113	2,140	2,179	2,202	2,233
Cumulative shortage*	-15	10	14	20	34	29	38	37	32	36	33
H611 - Heavy equipment operators (except crane)											
Demand forecast	16,846	17,319	17,566	17,786	18,112	18,209	18,580	18,714	18,777	18,985	19,153
Labour supply forecast	18,700	18,837	18,920	18,974	19,084	19,101	19,174	19,200	19,202	19,244	19,278
Cumulative shortage*	-154	182	346	512	728	808	1,106	1,214	1,275	1,441	1,575
H612 - Public works maintenance equipment operators**											
Demand forecast	4,709	4,727	4,746	4,792	4,797	4,857	4,919	4,978	5,049	5,108	5,168
Labour supply forecast	4,954	4,873	4,845	4,845	4,790	4,829	4,811	4,841	4,894	4,907	4,930
Cumulative shortage*	-45	54	101	147	207	228	308	337	355	401	438
H621 - Crane operators**											
Demand forecast	1,582	1,627	1,639	1,660	1,676	1,688	1,724	1,740	1,752	1,765	1,782
Labour supply forecast	1,705	1,723	1,726	1,739	1,742	1,756	1,771	1,785	1,798	1,802	1,813
Cumulative shortage*	-23	4	13	21	34	32	53	55	54	63	69
H711 - Truck drivers											
Demand forecast	43,241	43,498	43,436	43,471	43,608	44,042	44,669	45,314	46,129	46,825	47,699
Labour supply forecast	45,423	45,746	46,034	46,547	46,800	47,002	47,246	47,462	47,658	47,897	48,113
Cumulative shortage*	-82	-148	-498	-976	-1,092	-860	-477	-48	571	1,028	1,686
H712 - Bus drivers, subway operators and other transit operators											
Demand forecast	11,256	11,294	11,326	11,291	11,416	11,583	11,755	11,971	12,236	12,450	12,727
Labour supply forecast	11,676	11,729	11,853	11,938	12,098	12,206	12,277	12,381	12,483	12,575	12,676
Cumulative shortage*	-20	-35	-127	-247	-282	-223	-122	-10	153	275	451
H713 - Taxi and limousine drivers and chauffeurs**											
Demand forecast	5,986	5,897	5,789	5,708	5,662	5,741	5,827	5,924	6,056	6,153	6,291
Labour supply forecast	6,314	6,228	6,161	6,137	6,102	6,152	6,189	6,231	6,283	6,320	6,372
Cumulative shortage*	-28	-31	-72	-129	-140	-111	-62	-7	73	133	219
H714 - Delivery and courier service drivers											
Demand forecast	9,169	9,276	9,269	9,018	9,034	9,140	9,290	9,442	9,647	9,804	10,004
Labour supply forecast	9,293	9,413	9,478	9,317	9,355	9,411	9,481	9,542	9,616	9,676	9,736
Cumulative shortage*	-25	-38	-110	-200	-222	-172	-92	-1	130	227	367

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
H812 - Material handlers											
Demand forecast	20,139	20,254	20,282	20,301	20,474	20,705	21,012	21,308	21,672	21,987	22,368
Labour supply forecast	22,235	22,270	22,305	22,341	22,376	22,411	22,447	22,482	22,518	22,553	22,589
Cumulative shortage*	-197	-117	-124	-141	-3	193	464	725	1,053	1,333	1,678
H821 - Construction trades helpers and labourers											
Demand forecast	19,826	20,547	20,922	21,287	21,673	21,739	22,214	22,354	22,401	22,668	22,891
Labour supply forecast	23,018	23,044	23,065	23,086	23,107	23,124	23,145	23,162	23,178	23,197	23,216
Cumulative shortage*	-192	503	857	1,201	1,566	1,615	2,069	2,192	2,223	2,471	2,675
H822 - Other trades helpers and labourers**											
Demand forecast	3,078	3,128	3,174	3,210	3,252	3,281	3,340	3,378	3,418	3,457	3,496
Labour supply forecast	3,315	3,322	3,334	3,346	3,358	3,374	3,387	3,403	3,420	3,434	3,448
Cumulative shortage*	63	106	140	164	194	207	253	275	298	323	348
H831 - Public works and maintenance labourers**											
Demand forecast	2,467	2,525	2,559	2,601	2,666	2,719	2,785	2,835	2,880	2,926	2,951
Labour supply forecast	2,530	2,560	2,590	2,621	2,647	2,674	2,704	2,732	2,757	2,785	2,810
Cumulative shortage*	37	65	69	80	119	145	181	203	223	241	241
H832 - Railway and motor transport labourers**											
Demand forecast	1,001	994	998	973	989	1,000	1,005	1,009	1,027	1,035	1,047
Labour supply forecast	1,201	1,201	1,202	1,202	1,207	1,212	1,214	1,218	1,225	1,230	1,238
Cumulative shortage*	0	-7	-4	-29	-18	-12	-9	-9	2	5	9
I011 - Farmers and farm managers											
Demand forecast	38,660	38,559	38,415	38,311	38,244	38,168	38,069	37,954	37,838	37,774	37,669
Labour supply forecast	38,699	38,646	38,579	38,534	38,477	38,423	38,354	38,297	38,217	38,172	38,100
Cumulative shortage*	241	193	116	57	47	25	-5	-63	-99	-118	-151
I013 - Farm supervisors and specialized livestock workers**											
Demand forecast	1,508	1,517	1,526	1,535	1,545	1,555	1,564	1,573	1,591	1,591	1,599
Labour supply forecast	1,500	1,511	1,523	1,534	1,545	1,556	1,565	1,576	1,595	1,596	1,605
Cumulative shortage*	15	13	10	8	7	6	6	4	3	2	1
I015 - Landscaping and grounds maintenance contractors and managers**											
Demand forecast	3,260	3,288	3,316	3,333	3,365	3,404	3,441	3,470	3,515	3,555	3,600
Labour supply forecast	3,228	3,260	3,293	3,316	3,349	3,390	3,427	3,461	3,507	3,550	3,596
Cumulative shortage*	32	28	23	17	16	14	14	9	8	5	4
I016 - Supervisors, landscape and horticulture**											
Demand forecast	1,784	1,813	1,852	1,880	1,911	1,930	1,969	1,998	2,035	2,054	2,092
Labour supply forecast	1,779	1,810	1,852	1,884	1,915	1,936	1,975	2,007	2,045	2,065	2,104
Cumulative shortage*	17	15	12	8	8	6	6	3	2	1	0
I021 - General farm workers											
Demand forecast	9,459	9,441	9,413	9,394	9,388	9,363	9,348	9,324	9,305	9,285	9,272
Labour supply forecast	10,249	10,199	10,148	10,098	10,050	9,999	9,950	9,900	9,851	9,801	9,753
Cumulative shortage*	91	123	146	177	219	245	279	305	335	365	400
I121 - Supervisors, mining and quarrying**											
Demand forecast	780	780	790	800	800	810	820	829	830	839	849
Labour supply forecast	821	817	824	829	822	825	824	827	824	827	832
Cumulative shortage*	-15	-11	-8	-3	4	11	22	28	32	38	43
I122 - Supervisors, oil and gas drilling and service											
Demand forecast	16,801	16,924	16,997	17,143	17,317	17,497	17,757	17,905	18,011	18,166	18,295
Labour supply forecast	17,595	17,625	17,643	17,665	17,697	17,720	17,747	17,769	17,798	17,821	17,843
Cumulative shortage*	-329	-236	-181	-57	85	242	475	601	678	810	917

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1131 - Underground production and development miners**											
Demand forecast	900	901	909	919	927	925	942	949	949	955	954
Labour supply forecast	931	928	936	941	945	938	946	950	948	953	948
Cumulative shortage*	-2	2	2	7	11	16	25	28	30	31	35
1132 - Oil and gas well drillers, servicers, testers and related workers											
Demand forecast	19,105	19,236	19,289	19,450	19,582	19,740	19,963	20,073	20,175	20,242	20,377
Labour supply forecast	19,667	19,720	19,762	19,808	19,855	19,912	19,954	20,001	20,055	20,101	20,157
Cumulative shortage*	-43	35	46	161	246	347	528	591	639	660	739
1142 - Oil and gas well drilling workers and services operators											
Demand forecast	10,205	10,273	10,315	10,363	10,460	10,517	10,669	10,705	10,758	10,747	10,818
Labour supply forecast	10,507	10,537	10,567	10,597	10,627	10,657	10,687	10,718	10,748	10,779	10,810
Cumulative shortage*	-25	13	25	43	110	137	259	264	287	245	285
1212 - Landscaping and grounds maintenance labourers											
Demand forecast	12,046	12,213	12,393	12,532	12,748	12,929	13,164	13,338	13,545	13,712	13,876
Labour supply forecast	13,658	13,712	13,771	13,817	13,870	13,915	13,987	14,066	14,177	14,251	14,334
Cumulative shortage*	411	524	645	738	901	1,037	1,200	1,295	1,391	1,484	1,565
1215 - Oil and gas drilling, servicing and related labourers											
Demand forecast	5,393	5,438	5,451	5,493	5,560	5,621	5,703	5,747	5,764	5,813	5,849
Labour supply forecast	6,560	6,525	6,486	6,459	6,425	6,399	6,347	6,287	6,196	6,143	6,082
Cumulative shortage*	-190	-110	-58	11	112	199	333	437	545	647	744
J011 - Supervisors, mineral and metal processing**											
Demand forecast	1,427	1,444	1,445	1,448	1,466	1,468	1,465	1,474	1,484	1,493	1,492
Labour supply forecast	1,400	1,406	1,409	1,410	1,416	1,414	1,412	1,413	1,415	1,415	1,416
Cumulative shortage*	38	49	47	49	61	65	64	72	80	89	87
J012 - Supervisors, petroleum, gas and chemical processing and utilities**											
Demand forecast	3,866	3,889	3,890	3,889	3,923	3,959	3,981	4,000	4,019	4,037	4,054
Labour supply forecast	3,901	3,912	3,927	3,937	3,951	3,971	3,991	4,003	4,015	4,026	4,045
Cumulative shortage*	-4	8	-6	-17	3	19	21	28	35	42	40
J013 - Supervisors, food, beverage and tobacco processing**											
Demand forecast	1,293	1,301	1,291	1,294	1,302	1,304	1,301	1,311	1,321	1,330	1,329
Labour supply forecast	1,269	1,267	1,259	1,260	1,258	1,256	1,254	1,257	1,260	1,261	1,262
Cumulative shortage*	34	44	42	44	54	58	57	64	71	79	77
J015 - Supervisors, forest products processing**											
Demand forecast	1,181	1,189	1,189	1,192	1,200	1,202	1,199	1,199	1,209	1,218	1,207
Labour supply forecast	1,160	1,159	1,161	1,161	1,160	1,158	1,156	1,151	1,154	1,155	1,147
Cumulative shortage*	31	40	38	41	50	54	53	58	65	73	70
J026 - Supervisors, other mechanical and metal products manufacturing**											
Demand forecast	1,883	1,907	1,914	1,909	1,939	1,954	1,981	1,990	2,002	2,009	2,027
Labour supply forecast	1,912	1,914	1,914	1,913	1,914	1,909	1,915	1,910	1,909	1,906	1,905
Cumulative shortage*	-14	8	15	11	40	60	81	95	108	118	137
J112 - Petroleum, gas and chemical process operators											
Demand forecast	6,912	6,948	6,970	7,008	7,064	7,120	7,200	7,260	7,298	7,362	7,406
Labour supply forecast	7,170	7,173	7,178	7,182	7,185	7,189	7,193	7,197	7,200	7,204	7,208
Cumulative shortage*	-92	-59	-42	-8	45	97	173	229	264	324	364

Occupational forecasts	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
J132 - Plastic processing machine operators**											
Demand forecast	1,655	1,663	1,665	1,672	1,720	1,718	1,715	1,715	1,724	1,736	1,733
Labour supply forecast	1,644	1,648	1,655	1,660	1,655	1,663	1,670	1,674	1,679	1,688	1,694
Cumulative shortage*	49	53	48	50	103	93	83	79	83	86	77
J134 - Water and waste plant operators**											
Demand forecast	1,846	1,854	1,846	1,833	1,782	1,801	1,798	1,808	1,817	1,829	1,826
Labour supply forecast	1,840	1,835	1,832	1,828	1,813	1,812	1,810	1,806	1,802	1,802	1,799
Cumulative shortage*	49	62	57	48	12	32	31	45	58	70	70
J171 - Process control and machine operators, food and beverage processing**											
Demand forecast	4,015	4,022	3,998	4,078	4,123	4,155	4,166	4,181	4,203	4,215	4,232
Labour supply forecast	4,199	4,201	4,203	4,205	4,208	4,210	4,212	4,214	4,216	4,218	4,220
Cumulative shortage*	-87	-82	-108	-30	12	42	51	64	84	94	109
J172 - Industrial butchers and meat cutters, poultry preparers and related workers**											
Demand forecast	2,164	2,162	2,145	2,188	2,216	2,223	2,224	2,226	2,242	2,243	2,242
Labour supply forecast	2,259	2,269	2,277	2,286	2,295	2,296	2,304	2,314	2,324	2,333	2,342
Cumulative shortage*	-43	-55	-80	-46	-27	-21	-28	-36	-30	-38	-48
J191 - Machine tool operators**											
Demand forecast	3,685	3,714	3,709	3,700	3,756	3,791	3,815	3,836	3,868	3,896	3,865
Labour supply forecast	3,788	3,796	3,794	3,797	3,806	3,809	3,807	3,810	3,813	3,816	3,815
Cumulative shortage*	-15	6	3	-9	38	70	96	114	143	168	138
J194 - Metalworking machine operators**											
Demand forecast	1,596	1,606	1,608	1,600	1,621	1,641	1,652	1,668	1,683	1,692	1,688
Labour supply forecast	1,641	1,641	1,645	1,642	1,643	1,649	1,648	1,657	1,659	1,657	1,666
Cumulative shortage*	-7	3	1	-4	16	30	42	49	62	73	60
J216 - Mechanical assemblers and inspectors**											
Demand forecast	2,089	2,105	2,104	2,097	2,129	2,148	2,169	2,195	2,222	2,249	2,186
Labour supply forecast	2,110	2,113	2,114	2,115	2,119	2,119	2,121	2,126	2,127	2,132	2,097
Cumulative shortage*	-21	-8	-10	-18	10	29	48	69	95	117	89
J228 - Other assemblers and inspectors**											
Demand forecast	2,002	2,017	2,017	2,016	2,045	2,064	2,081	2,105	2,123	2,143	2,137
Labour supply forecast	2,013	2,016	2,020	2,030	2,041	2,052	2,057	2,076	2,087	2,100	2,112
Cumulative shortage*	-11	1	-3	-14	4	12	24	29	36	43	25
J312 - Labourers in metal fabrication**											
Demand forecast	1,785	1,799	1,800	1,794	1,813	1,829	1,835	1,844	1,854	1,872	1,880
Labour supply forecast	1,785	1,781	1,779	1,773	1,769	1,767	1,762	1,756	1,748	1,748	1,746
Cumulative shortage*	0	18	21	21	44	62	73	88	106	124	134
J317 - Labourers in food, beverage and tobacco processing**											
Demand forecast	3,271	3,281	3,272	3,262	3,298	3,319	3,329	3,348	3,378	3,395	3,420
Labour supply forecast	3,580	3,572	3,563	3,556	3,556	3,549	3,542	3,538	3,534	3,526	3,521
Cumulative shortage*	-30	-20	-20	-23	13	41	58	81	115	140	170
J319 - Other labourers in processing, manufacturing and utilities**											
Demand forecast	2,190	2,203	2,204	2,207	2,228	2,255	2,271	2,290	2,320	2,338	2,368
Labour supply forecast	2,383	2,390	2,397	2,409	2,408	2,424	2,435	2,443	2,456	2,463	2,479
Cumulative shortage*	-13	-7	-13	-22	0	11	16	27	44	55	69

* Supply shortage if positive, supply surplus if negative. The cumulative shortages are calculated using 2012 as the base year.

** Historical data has a coefficient of variation > 16.5 and < 33.3% and should be used with caution.

*** Not elsewhere classified.



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